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ABSTRACT

Eleven essays explore the educational effects of social forces and agencies outside of the formal school environment. Speakers at the 1977 Chief State School Officers' Institute examined how these social forces can be used to enhance the work of the American school system. Speakers represented schools of education, research institutes, media groups, professional education associations, and individual institutions of higher education. Topics discussed were American culture, the family, media, arts and humanities, religious phenomena, the American political system, the American economic system, the business/labor/industry complex, and the educational effects of nutrition. The concluding speech considered the special responsibilities of chief state school officers and the benefits and pitfalls of comprehensive educational planning. (AV)

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Beyond the School: What Else Educates?

A Report of the
CHIEF STATE SCHOOL OFFICERS
1977 SUMMER INSTITUTE
Sponsored by the United States Office of Education
in cooperation with
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edited by
Kenneth H. Hansen, Institute Director

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INTRODUCTION

In 1976, the Chief State School Officers' Institute focused on the topic "Learning," with particular concern for the school environment itself as the primary educative force.

For the 1977 Institute, the Chiefs decided to probe a closely related topic — the learning that takes place in the broader societal environment. "Beyond the School: What Else Educates?" became, thus, the theme for this year's training session.

Once again, as in the previous seven annual institutes, the Chiefs sought and secured the services of an outstanding group of experts who could illuminate the many different facets of the topic, detailing not only the educative effects of social forces and agencies outside of the formal school, but suggesting how these could be used to enhance the work of the American school system.

This report reproduces the substance of the major presentations, and stands by itself as a significant document. But it is not a complete "institute report," for many of the most important outcomes for the Chiefs in attendance resulted from the insightful questioning of speakers by panel members, and from the give-and-take of discussion which enlivened each day's sessions.

Although prepared primarily for the Institute participants, this report will be widely distributed — and, we hope — profitably read by others interested in our schools and our society.

Kenneth H. Hansen
Institute Director

CHAPTER I

THE AMERICAN CULTURE AS EDUCATOR

Fred M. Hechinger
President, The New York Times Company Foundation

It seems to me an act of great daring on your part, as leaders of American public education to assign to me the topic of "The American Culture as Educator." An innocent observer might suspect that you — the guardians of the public schools — have become infected with the virus of de-schooling. It is, after all, Ivan Illich's grand design that the revolutionary society and its total cultural impact would some day take over all educational functions and responsibilities and thus bring about the withering away of the school or the de-schooling of society.

You may rest easy. I do not intend to report to some alarmed Congressional committee that the nation's Chief School Officers are conspiring to bring about the de-schooling of America. On the contrary, I find it a matter for great rejoicing that you reject the narrow view of the schools operating in splendid isolation from the American culture that has so often deceived the nation's school leaders and ultimately undermined their effectiveness. As we documented in our book "Growing Up in America," the American school never could set its agenda in disregard of the society it was established to serve. American educators have always courted danger and defeat when they ignored the impact of major cultural and social currents. The role of the American culture as educator is real and strong, for better and for worse. It is for us, not to deny that role, but to learn how to extract from it the best and shun the worst effects on education.

History offers ample proof that there is nothing new in the concept of the dominant culture as educator. Children in the Puritan era got their start studying their ABC's by way of the illustrated verse on the opening page of their primer that warned them: "In Adam's Fall/We Sinned All."

Later, in the early years after the founding of the Republic, learning derived the benefit of that era's political and philosophical giants. The founding fathers gave their contemporaries more than the Declaration of Independence and the Constitution; they provided a new mission for education. It was Thomas Jefferson who warned that "if a nation wishes to be both ignorant and free, it wants what never was and never will be in a state of civilization." But Jefferson did more than exhort; he sketched out the intimate connection between education and a free society; he provided the first blueprint for the creation of independent school districts; he set forth in great detail the way in which an aristocracy of talent would replace the established aristocracy of inherited, unearned privilege.

All the early spokesmen for the new nation — Jefferson, Franklin, Madison, Webster — understood the absolute necessity to create a cohesive nation, with common symbols and traditions, with shared goals and with a single language. And the schools were to be the instrument to create that cohesion. Americanization was the unquestioned mission of the school because it was the unquestioned priority of the country.

Then as now — it is well to recall at this point — the culture was also capable of some fatal errors, and capable, too, of inflicting those errors on the schools. Just as the anti-slavery faction of the Continental Congress failed in its efforts to include black Americans in the benefits of the newly established free society, so the schools failed to make equal educational opportunities available to black children. In 1789, Franklin, who was president of the Abolition Society, warned Congress during one of his last public appearances that the issue must be faced. He implored the members to "devise means for removing that inconsistency from the character of the American people." How much personal misery and national tragedy might have been averted had the American culture at that time not been so stubbornly committed to an immoral, irrational and indefensible course! Can we afford ever to forget this tragic example of the American culture as miseducator?

Let me cite, however, a few more outstanding examples of the positive impact of the American culture on education. Today, we blithely accept the Land-grant Act as a historic milestone. The measure, approved by Congress in the midst of the Civil War, not only transformed the university in the United States but has since become the model of higher education in virtually every country that hopes to develop from primitive to advanced social and industrial patterns. What could have been more revolutionary than to take the university, with its classical remoteness from daily life, and make it the agent for the upgrading of farming, animal husbandry and the mechanical revolution? Yet, it was not education and its leadership that shaped and passed the historic legislation; it was the politics of the day — the American culture at large — that understood the new needs of a changing country and gave educators their new mission. (All this did not happen without stubborn resistance from some of the traditionalists who saw in the new "aggies" or "cow colleges" nothing but the destruction of old standards, just as traditional educators today see in the open access to higher education nothing but the destruction of old standards.)

In the schools of that era, too, the American culture changed educational goals with a vengeance. The dominant culture then was the railroads and the emerging factories. Standardization and centralization were the order of the day. And your predecessors — the newly created and powerful profession of educational superintendents (even the term was borrowed from industry!) were frantically searching for what the American culture demanded: the one best way. (Philbrick: "the one best desk.") Punctuality and steady habits were the watchwords. (Toe the line.)

Along with it all, the culture once again demanded the rapid and effective assimilation of millions of children who accompanied the stream of immigrants to the promised land. The American culture called for a melting pot, and the schools tried their best to provide it. (Mary Antin; Leonardo

Coviello; Esther Oberhein - E. O'Brien; Giuseppe Vagnotti - Mike Jones.)

So much for history. Today, the American culture changes more rapidly than ever before. The result is uncertainty, rootlessness and confusion. Within less than two decades, the Youth Culture, with its all-pervasive impact on everything from music and literature to fashions and the styling of automobiles, has come and gone. Sociologists tell us that we are on the threshold of the Old-Age Culture. We are told that politicians who only so recently were deadly afraid of the Black Panthers are standing in similar fear of the prospect of the Gray Panthers.

Whatever the reasons, the American culture is no longer as cohesive as it once appeared. The melting pot is no longer viewed as the standard American solution to all problems; indeed, the melting pot has fallen into disrepute as an un-American device charged with a coercive goal — a far cry from the once universally admired goal of "E Pluribus Unum." Ethnicity and the search for one's roots have become priority concerns. It seems to me ironic that this should have been the response to the expressions of black nationalism which was born largely of the white denial to allow blacks to share the melting pot's benefits. Perhaps the present ethnic fragmentation (which to me has strong elements of a new racism) is a necessary preparation for a stronger, more perfect union which ultimately will not exclude anyone for ethnic or racial reasons. Let us hope that this is so. But for the moment, American education must operate in a culture that places at least as much stress on ethnic fragmentation — pluralism may be a hopeful euphemism — as on the binding cement of Americanization.

While much lip service is still being given to the importance of a liberal education, there is little agreement concerning the content of such a curriculum. The general complaint is that young people read little, and the little they do read is largely contemporary and frequently of rather ephemeral value. The classics are generally neglected. When I recently sampled a representative group of college freshmen, their composite view of their high-school instruction in American history was that they knew little about anything other than the events of 1776, the Civil War, Reconstruction (their knowledge of the latter was confined to the code word "carpetbaggers") and World War II. Although most students of that vintage had some vague knowledge and formed some political judgments about Vietnam, they had little historical equipment to put that episode in any kind of perspective. Even that fact did not seem to bother them since the passage of five years already separated the activist anti-Vietnam student generation and last year's freshmen by a wide political and intellectual gap. (As an aside, the current lack of interest in the classics may not be a new phenomenon. In 1814, Jefferson had written to John Adams that he had been reading Plato's *Republic* and that, "while wading through the whimsies, the puerilities, and the unintelligible jargon of this work," he asked himself how the world could so long have "consented to give reputation to such nonsense as this." We might add, however, that however critical Jefferson might have been of the classics, he at least read them.)

What is the American culture? It is Eugene O'Neill and musical comedy. It is Hemingway and Steinbeck but it is also soap opera and bloody cops-and-robber serials. It is Mark Twain and Woody Allen, but it is also the flood of porno sideshows. It is the *National Geographic* but also *Playboy*. It is what critics of the American culture used to call Coca-Colonization — but anyone who has traveled abroad knows that the condemnation of the American mass-culture as a degrading form of capitalist imperialism is a gross distortion of the facts. The American mass-culture, with its supermarkets and fast-food dispensers, its mass-produced fashions and books and magazines, struck a responsive cord across the world, not only because it was often vulgar (which it was) but also because it helped to liberate the masses from restrictions that had limited their lives; because it helped the common people everywhere to share for the first time in the conveniences and the luxuries that had in the past been reserved for only the privileged few.

American culture is all that: it is *Pleasy v. Ferguson*, but it is also Earl Warren; it is the Klan but it is also Martin Luther King. American culture is the petty fears that make vigilante groups raid school libraries in the name of protecting the purity of children's minds, but it is also the living heritage of the Bill of Rights. American culture still is often plagued by obsessive fear of everything foreign and different, but the American conscience continues nevertheless to keep the gates open to thousands who seek refuge and asylum. The American culture includes its share of provincial chauvinism, but it has also given birth to the Marshall Plan, the most imaginative and altruistic policy of international responsibility ever put forth by any world power.

All of these fragments are part of the American culture as educator. Each of these segments, characteristics, virtues and flaws teaches. Inside and outside the school, they have their impact on what young people learn, what they cherish, what they loathe. When the nation withdraws into its shell of isolationism, as it does periodically, foreign languages go into decline. When Americans become obsessed with only the relevancy of the present, history is ignored or recast by opportunistic revisionists.

A nation teaches through its psyche. For most of America's first 200 years, the inner drive was expansion, growth, more of everything for every generation and forever. When Jefferson bought Louisiana, he thought that Americans would thus enjoy a surplus of land for over a thousand years. But much sooner than the optimistic spirit of a young nation had dreamed, limits were reached. The frontier closed. The search for new frontiers and for the great society was made increasingly difficult as America drifted — rushed, in the past decade — from its dream of unending expansion into a period of neogrowth and, at least in terms of population statistics, even of decline.

Progress and planning are far more difficult in such a period, when less must be made to be, not worse, but better. The realization that, even in America, resources are limited is hard on people's tempers. Conservation means sacrifices. But there is little consensus about what to give up and what to preserve, just as there is less cohesion in a society that sees all its institutions — the church, the government, the family, the school — if not in a state of crisis, then at least in flux. There was little question about what the American culture was teaching, and expected its schools to teach, when it was assumed that *Father Knows Best* and when it was believed that "the family that prays together stays together" or, indeed, that most families do stay together.

It was easy for the school to teach the culture's lesson when America's role in the world was widely believed to be readily described by such slogans as "Speak Softly and Carry a Big Stick" or by the simple faith that we could "make the world safe for democracy."

I need not tell you that the culture today has no such simple or universally believed lessons to teach. And yet, the culture is, for better or for worse, a more insistent and inescapable educator today than ever before. The culture and its current predominant views are transmitted constantly through mass-communications that never rest, never slow down. Speed in transmission has dramatically shortened the cultural, political and ideological cycles. The pendulum swings with infinitely greater speed from conservatism to liberalism. The result is less stability, less faith in past solutions, less patience to wait for gradual answers to pressing problems.

The news media are the transmitters of the culture but they are also the forum from which the culture teaches — long before children enter the classroom. The media-culture combination is powerful. It has made contributions that few classrooms could ever match. Without it, the civil rights triumphs would not have been possible; century-old injustices could not have been corrected. Without that combination, cancerous corruption in our government could not have been brought to light, nor a mysterious, distant war brought to an end.

But the media-culture combination also carries within its power an enormous potential for the wrong kind of popular instruction — the debasement of tastes, the trivialization of politics, the rapid and irresistible diffusion of foolish and debilitating fads. (What a contrast to the constant preoccupation in the Founding Fathers' writings with the "diffusion of knowledge!")

Moreover, much of the new culture — certainly its most compelling aspect — is visual and aural. In this respect, the culture is a one-sided teacher. It blatantly neglects the written word. Children learn at an early age to pick up the phone to thank Aunt Nelly for that latest Country-Western record. The paucity, in both volume and style, of contemporary letter-writing invites a devastating comparison with the letters of an earlier age. Modern political oratory consists of speeches group-produced by media and image experts rather than by the politicians themselves. Their quality teaches young people at an early age that the way to gain a reputation for eloquence is to be able to afford a stable of speech-writers.

And yet, the opportunity to enlist all of society in education is enormous, if only we learn to be discerning and selective in enlisting the best elements of our culture in the omnipresent education process. Television is the prime example. Rather than reject it as nothing but a vulgar and distorting intrusion on the business of the school, we ought to enlist its vast power as an ally. Television, properly used, can become an incentive for reading and personal exploration rather than a mere pacifier. But this requires of us, as parents and educators, an early participation in our children's viewing. If we of the older generation merely scorn the new medium, then we build an impenetrable wall between the generations, far more destructive of mutual understanding and even of communication than the temporary generation gap of the confused Sixties.

One last word of warning. The newly popular view among educators that the whole society teaches (which is entirely true) could readily lead to a situation where nobody truly teaches, where nobody takes responsibility for the values and priorities. The culture as educator is persuasive and pervasive; but it is also amorphous, confusing, aimless. At the moment, for example, it says to the young that abortion is all right provided one can afford it, but it is all wrong if public funds, rather than private wealth pay for it. At the moment, the most audible political voices seem to be saying that the death penalty is the best and cheapest way to control crime, drowning out those who suggest that the overwhelming number of crimes which plague our cities and our citizens would never be affected by the death penalty; and also drowning out those who warn that it is the breakdown of the criminal justice system, and not the absence of capital punishment, that undermines the power of law-enforcement as a deterrent to crime.

What the school can do — what the school must do — more than ever before is to focus on the priorities, to teach the young how to make informed choices in selecting from the vast supermarket of views and options presented by the culture as educator. The schools cannot do this by standing aside, sulking and contemptuous of the mass-culture. The school must learn to understand that culture, to understand TV and the media of news and entertainment. But the school must also help to establish criteria of quality — quality in matters of taste, quality in the asssessment of law and justice, quality in each person's reaction to each printed or televised message. The people's right to know must be matched by the people's capacity to understand, to analyze, to sift the genuine core from the vast surrounding body of sham and triviality.

The admirable concept of life-long learning must be turned into more than a slogan, more than an emergency ploy to fill vacant college places. It must be a continuing process of selecting out the best the culture can teach, inside and outside educational institutions. But it must be accompanied by a clear understanding that every learning experience does not equal every other learning experience in value and desirability.

We could do worse at this point in our history than to recall John Dewey. He was among the first of the educational pioneers to grasp the concept of the culture as educator; but he also knew that the school could never afford to abdicate to the culture. When society no longer taught the young how the tools of life were shaped and created, he demanded that children be given an understanding of the process by letting them make by hand the objects that the modern culture manufactured by remote machinery. When he felt that the society at large might present to the young a corrupt or distorted picture of American institutions, he urged the schools to be — embryonic societies, yes; but embryos of a just society. The present culture, aided and abetted by the Supreme Court, may teach that it is *constitutional* to beat pupils; but the school as educator surely is not compelled to accept that cultural lesson as right and proper; on the contrary, the school as educator has a unique opportunity, through its action, to re-educate the culture.

This may seem like an overly simple example. There is virtue in simplicity when it comes to the assignment of important new roles — to school and to society — as educators, sometimes as allies, at other times as rivals. If the school ignores society's new educational impact and potential, then the school will be bypassed and will stagnate in self-imposed isolation; but if it abdicates to the culture-at-large on the theory that everybody may teach anything, then the school will be guilty of the slow but inexorable de-schooling.

Above all, the school must view itself, in Dewey's terms, as the special agent of America as a "deliberately progressive society." That is no statement of political ideology; it is a reaffirmation of the American prospectus written in this nation's finest era just over 200 years ago. Even at a time of no-growth, when powerful elements in the society express petty reservations about open access to education, professional educators must stand in the vanguard of the battle to remove the barriers to educational opportunity. I recently attended the commencement of the City College of New York. One of the graduates, a black youth from the ghetto, recalled that when he left high school with a shaky academic record, he saw little hope or opportunity ahead. Something happened to that young man after he was admitted to college. In the four years that followed, an unsuspected spark somehow turned into a bright flame. He compiled a perfect grade score and left college as a brilliant scholar.

This example embodies the best achievement of the culture as teacher. In an extension of the American blueprint, the larger society has, in recent years, taught our professional educational establishment that nothing is quite as important as keeping the doors to school and college open, for all, without discrimination, and throughout life. There are danger signs that the society is having second thoughts about such largesse. A less optimistic, less generous conservative spirit has once again risen, ready to restrict and to limit, anxious to apply simplistic cost-accounting to the amount of education to be made available. Now, therefore, it becomes your task, aided by any of us who are ready to be your allies, to convince the society that the true bottom line is not the sum of the cost but the sum of the opportunities offered and accepted, minds opened, youths made productive citizens. There will be no second Louisiana Purchase to keep the American frontier open and the American dream alive. It is for those who know and love education to persuade that larger educator of the American culture that education alone remains America's invisible frontier.

CHAPTER II

AMERICAN FAMILIES AS EDUCATORS

Wilbur J. Cohen*, A. Sidney JohnsonIII*, Theodora Ooms*

Our approach to the topic of this paper — the Family as Educator — is an immediate outgrowth of the focus and work of the Family Impact Seminar in Washington, D.C., in which we all participate. Thus we will spend a few moments first outlining the goals of the Seminar, which will serve as an introductory background to the discussion to follow.

The Family Impact Seminar is an independently-financed, three-year project based at the Institute for Educational Leadership at George Washington University. The Seminar represents the first sustained attempt to look systematically at Government's relationship to families by developing and testing a "tool" — the family impact statement — for encouraging government to be more aware of and sensitive to what it does to and for families.

The idea of developing what might be called family impact statements was first proposed in the Hearings held by the Senate Subcommittee on Children and Youth in 1973 entitled "American Families: Trends and Pressures." Vice President Mondale, then a Senator and Chairman of the Subcommittee, stated that the hearings were "predicated upon the simple belief that nothing is more important to a child than a healthy family . . . . . "We must start," he said, "by asking to what extent government policies are helping or hurting families . . . these hearings are designed to encourage exactly that kind of reexamination . . . Our goals will be to identify and seek changes in arbitrary policies that place hardships on families with children: to develop policies that provide alternative ways of strengthening families; and to determine how we can provide the options and choices that families need to do their best job."

Many witnesses, clearly influenced by the example of the environmental movement and the new legislation requiring environmental impact statements, suggested that a comparable tool might be used to anticipate and assess the ways public policies affect families. However it was abundantly clear that there were so many important differences between environmental impact and family impact — differences of difficulty of measurement, complexity of dimensions, sensitivity of ethical and political questions involved — that the idea would need to be carefully researched and cautiously tested before any recommendations for action were made.

We have spent our first year in an exploratory stage with Seminar members (who meet 5-6 times a year) and a small staff learning from each other, and others we have talked with about the complexity and importance of the task ahead of us. We have discussed a broad set of programs and issues which convince us both of the breadth and depth of government involvement in families and of the need to be flexible in the analytic approach of family impact. For example, we review from a family impact perspective programs targeted towards teenage pregnancy and foster care; aspects of housing, and welfare programs; Medicaid and Medicare policies which offer incentives towards institutionalization of the aged; agricultgural extension programs and the treatment of one-earner families, vis-a-vis two-earner families, in social security and income tax policies. By October we will have chosen four programs or policies around which we will set up task forces designed to research and write feasibility family impact statements. These preliminary statements will be circulated widely for reaction and comments. Our final report and recommendations will be completed by early 1979.

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*The authors are all related to and involved in the work of the Family Impact Seminar in the Institute of Educational Leadership at George Washington University in Washington, D.C. Sidney Johnson is the Director of the Seminar. Theodora Ooms is its Deputy Director, and Wilbur J. Cohen, who is Dean of the School of Education at the University of Michigan, is one of the seminar members.

Our work thus far suggests that the questions we are raising are a new and helpful perspective on public policy which is not just limited to the level of federal legislation and administrative actions. In examining impact we feel it is essential to try to trace any government activity through levels of government down to where the families are. Hence the Seminar's emerging conceptual framework is a broad one. Individuals and especially children need to be understood in the context of their families. Families are most directly affected by their relationships with the institutions with which they have daily contact: their place of employment, schools, social service agencies and government offices, neighborhood church and media. Families can either feel supported by these local structures or alienated from them. They can be involved with them in a meaningful way or isolated from them.

The Seminar will be looking directly at the world of work and how it impacts on family life as we have chosen Government as Employer as the focus of one of our four task forces. This paper is an opportunity for us to use the family impact framework to raise questions that we think are of great importance about the relationship of families to schools, and vice versa.

Definition

What is meant by "Families as Educators"? Broadly the term suggests a growing recognition among educators and educational researchers that family members have a crucial role to play in educating and socializing children, especially in the early pre-school years, but also once the child is in school. As you know so well, we are now more ready to assert that the total responsibility for education does not fall upon the teacher in the classroom environment within a school building. We recognize the need to take into account the important role of the individual student's parents and family in providing the basic skills, motivation, support, and reinforcement which are necessary to his/her learning both in school and out of school. Schools cannot do it all. Research is underscoring this conclusion, and has directly and indirectly influenced many new developments and shifts in educational policy.

Significant Themes

This significant body of studies culminating in the Coleman Report, in the '60's, and later in Jencks' study — in the '70's — in searching for explanations why the "disadvantaged" groups of children did not perform well in school in spite of varied school inputs and conpensatory programs, suggested that the conditions surrounding "families" were the key explanation. More precisely, they suggested that families' low socioeconomic status accounted for the education handicaps which were so difficult to overcome. The major solutions suggested by these findings were racial and economic integration in schools and direct attacks on the root causes of poverty.

Further research suggested that the fact that lower class parents talked less to their children led to stunted cognitive skills. The implication of these findings was increased emphasis on parent education programs and parent involvement.

Yet a new focus of studies places less emphasis on looking for causes of failure and deficits and more on understanding the complex ways in which "educational functions are divided among the family and other institutions." [1] It focuses on the family as a "system" open to a multitude of external influences. Teachers College, Columbia University, has recently established a Center for the Study of Family as Educator, which is conducting some interesting research drawing on interdisciplinary knowledge.

Jensen-Leichter and her colleagues at this Center are interested in a definition of "family" that is broader than "parent and child." She asks about the influence of parents on children *and* children on parents; and about the effect of siblings on each other. Margaret Mead, in the same volume, discusses the role of grandparents as educators. Their influence was originally associated with that of conservatism. Now she thinks that is no longer true (the grandparent generation has seen and survived more change than any other) but that they have a vital function to play in teaching about continuity and adaptability: "The strength that comes from a sense of continuity for the past and hope for the future is sorely needed." Mead makes several very practical suggestions concerning how schools can help to bridge this generation gap.

A further group of studies and concern focus on the discontinuities between the cultural values of family and home, and those of the school. "The structure of the modern school . . . tends to drive students toward extreme individualism, excessive and unstable peer-centeredness and hedonism . . . Such behavior is obviously inconsistent with the values of most parents."[2] There have been various educational responses to this type of criticism of school structures, environment and ideology, which move in the direction of humanizing the schools and bringing in family. These include. multi-age grouping; older children tutoring younger children; bringing parents into the classroom to share their skills and experiences; curricula emphasizing affective education and values clarification; curricula centered around teaching about child development with practice units in pre-school centers; and an emphasis on bilingual education. These and other methods are all attempts to "bring family" into the school, or bridge the distance between the two environments.

Urie Bronfenbrenner, in a comprehensive review of early intervention programs,[3] concludes that those programs that are most effective are those that involve the parent *directly* in activities *with* the child and that the earlier such activities are begun and the longer they continue the better. There is, he says, no evidence that traditional forms of parent education involving courses, dissemination of information and counseling addressed only to the parent are effective. One must wonder, however, whether the employed single parent or the two-earner family are effectively excluded from such benefits by their inability (not willingness) to participate in these programs.

The curious fact is that in spite of all this new interest in the role of the family as educator and of the influence of family on outcomes in schooling, school and family continue to be conceived of by scholars as two parallel systems, that somehow are supposed to intersect and communicate only through the child who needs to "mediate" between these two worlds.

The family impact perspective leads us to conclude that this thinking reveals a serious omission. It is not sufficient to engage in close up detailed portraits of processes within schools and within families. We need to adopt the approach of a camera with a zoom lens that focuses on the interactions betweeen the family and school systems both from a distant general perspective and in concrete, specific detail. Regretably, few educational researchers and child development specialists have expressed any substantial sustained interest in studying the dynamic interconnections between families and schools.[4]

We want to underscore that our questions and suggestions that follow in the next section of this paper focus almost exclusively on the school's role in what is in fact a two-way relationship.

GAPS IN RESEARCH AND PRACTICE

Yet if it is admitted that both family and school *share* in the education of the child, then it becomes critical to ask questions about the nature and effectiveness of this partnership. As with any other partnership, we need to ask, are the roles complementary or competitive? Do school and family support each other or undermine each other? Do they respect each other and learn from each other? Do they have expectations about each other's roles and about the child which are openly shared, and hopefully don't conflict?

To shift for a moment from the world of research to that of practice: how in fact do schools and families relate to each other? What are the pathways of communication? What are the attitudes and expectations of teacher to parent and parent to teacher or administrator? What priorities are given within the school budget and schedule to parent-teacher relationships? What do teachers know about the realities of families today? What are the places in the teacher training or on the job supervision where they are supposed to learn about how to communicate with parents, how to conduct and learn from conferences, and what can be achieved from such communication?

How in fact do school systems understand and relate to the current realities of family life? In an age when the majority of school-age children's mothers are working, what rethinking have schools done about their daily

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[1] Hope Jensen-Leichter, in December issue of the Teacher's College *Record*, 1974.

[2] Edward Wynne, "Schools that Serve Families," from the *National Elementary School Principal*, August, 1976.

[3] Teachers College *Record*, December, 1974.

[4] It is of note that a recent major study, undertaken by the National Academy of Sciences "Toward a National Policy for Children and Families," published, 1976, doesn't discuss the importance of schools in families' lives.

schedule, their vacations, their sudden snow days or teacher inservice days? We are not here suggesting that schools should necessarily adopt a primary childcare function, but rather that further assessment should be made of what could be done to meet the needs of the younger children of employed parents, and that more teachers and parents alike realize that these scheduling problems are experienced by great numbers of parents and can no longer be safely ignored.

How often do teachers assume parents are uninterested in their children when they fail to come to school conferences or meetings, or fail to participate in school projects and omit to inquire whether the parent can ill afford a day off work or a babysitter? How often do teachers reach out to contact fathers or other significant family members? These are just a few of the questions that need to be asked.

We would suggest that too frequently parent-school encounters amount to little more than "public relations" efforts. Too often both parties dutifully go through the motions, but are relieved when the meeting is over. Indeed, they can be disastrous events where parent and school angrily blame each other for a child's failure or problems, and the child suffers from being in the scapegoat position. There are, on the other hand, some schools and occasional teachers who are able to create a genuine partnership between family and school. This partnership is based on mutual respect for each other's expert knowledge about the child and a faith that a real sharing of this knowledge will result in enhanced growth and learning. Moreover if this kind of relationship is established, the minor learning or behavior problems — which the majority of children at one time or another experience — can be coped with by parents and teachers jointly exploring the reasons for the difficulty and developing strategies for dealing with the problems. In these and other ways sensitive partnerships between teachers and parents can sometimes avoid the need for outside, professional consultation, and prevent aggravation of the problem.

This kind of partnership implies a commitment of time, energy and resources and a considerable flexibility on the part of already burdened and isolated school teachers and administrators. (Flexibility to make phone calls in the evening, to write notes home reporting on good achievements, as well as problems, etc., to be willing to meet with both parents early or late in the day, etc.) Teachers who perform in this way often find they are rewarded by improved results in the classroom and a much greater sense of support from the parents. However, for the exception to become the rule, school boards and administrators would need to explicitly recognize that school-family relations are an area of high priority.

Thus far our discussion of family-school relationships has focused on the problems and suggested some directions that apply primarily to the elementary school level, where it seems improvement can most easily be made. The gap in communication and partnership is even more acute at the junior and senior high school levels. Because of specialization there is rarely any teacher or school personnel beyond the sixth grade who knows their child well enough to be able to communicate meaningfully with his/her family. Faculty and counselors at this level are also often committed to respecting the privacy of the adolescent so that they tend to avoid contacts with parents. One consequence is that problems of school failure, drug and alcohol abuse, nonattendance, etc., often come to the attention of parents far too late.

There are some family-relevant trends in high schools, which are taking the direction of increased rights of child and family to due process hearings (for suspension, special placement): rights to access of school records, rights to appropriate education (for handicapped, etc.). The challenge of humanizing the junior high and high schools sufficiently that family and school can work in partnership seems at times insurmountable and is partly related to size. Some schools which have subdivided into smaller administrative units, and have a teacher/counselor being responsible for following the child through his/her four years, collecting reports from other teachers, etc., are better able to communicate with parents.

Other new emphases to deal with teenagers' increasing alienation from the world of adults in general, as well as from their parents, are increased opportunities for on-the-job experiences, and apprenticeships, vocational education, and learning "beyond the walls." Some communities are involving parents heavily in devising approaches for dealing with problems of alcohol and drug abuse, and less often — but equally important — sex education programs and curricula.

Sex Education — in its broadest sense — is a critical example of the failure of family-school partnerships. Our increased awareness of the extent of teenage pregnancies (approximately one half a million each year) and the grave health and social risks involved, of the rapidly increasing *rate* of pregnancies among the youngest age group 12-15 years, and of the high risks associate with teenage marriages make this a topic of widespread concern. Eunice Shriver recently pointed out that our society is placing our young persons into a classic "double-bind" situation: media, advertising and generally more permissive standards of behavior urge teenagers implicitly to become sexually active, yet the authorities from whom teenagers generally derive their standards — parents and schools — seem to be powerless and give little effective guidance.[5] Who should step into this vacuum?

The Seminar is currently studying teenage pregnancy and the appropriate role of government towards prevention of pregnancy. Our first tentative conclusions suggest that indeed much stronger government dollar support is needed both for birthcontrol and sex-education programs but that the families, schools and communities need also to be involved in these programs and not by-passed. Programs must respect the diverse values of different families and communities, to be more acceptable and effective. Teachers are right to assert that sex education is not their job alone.

We have intended in this paper to sketch what are some of the family impact questions stimulated by an understanding of the family's role as educator. Having highlighted what we believe is a significant gap in research and professional thinking, we do not intend to imply that changes must wait for more research or changes in the professional schools. Nor is it enough to make a plea for more parent education courses, or pre-school parent intervention programs. School systems can begin, as some already have, to critically evaluate the partnership between family and school, and their role in this partnership.

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[5] There have however been some promising improvements in enabling pregnant teenagers and teenage mothers to remain in school.

Suggestions:

In conclusion, let us suggest some concrete changes that you could help encourage in your own school systems. Some will require additional resources which we recognize in this time of serious financial limitations will pose some difficult choices.

1. The teacher's role, especially at the elementary level, needs to be redefined to include a responsibility to build a partnership with the pupils' families. If this were done, the schools of education would need to re-evaluate their curricula with regard to preparing teachers for this responsibility.

2. Selected schools might experiment with innovative approaches: kindergarten teachers making home visits to every child at the start of school; parent-teacher conferences could be scheduled at the beginning of the year to learn from each other and not only on the potentially tense occasion of the report card. Volunteers might be used to relieve teachers' time for conferences. Any such innovations should be carefully evaluated by parents and teachers alike.

3. Parent groups -- P.T.A.s, etc. -- should be involved in any evaluation of parent-school relations, planning of workshops or alternative approaches. Parents themselves can help say what it is appropriate to ask from parents in the way of support.

4. Schools should address the special needs of children under 11 whose parents are employed by exploring what could be done to help parents provide more appropriate care for their children after school, when they are sick, or on vacation.

5. All schools -- especially those which used to rely heavily on the help mothers gave in classrooms, on trips, and in libraries -- need to explore Margaret Mead's suggestion about involving the grandparent generation in school activities.

6. With regard to problems of sex education and teenage pregnancy, school administrators and personnel should be meeting with parents (including those who are opposed to such programs), church and community leaders and teenagers to share facts and recommend solutions that might involve specialist teachers and specific curricula but might instead be part of an after-school, or community-school program.

These are some beginning suggestions. You will think of others which may be more relevant and more urgent to the needs of your state and local communities.

CHAPTER III

THE MEDIA AS EDUCATORS

JOAN GANZ COONEY
President, Children's Television Workshop

I'm very happy and honored to have been asked to address this exclusive group of influential educators.

I feel though that I may be bringing proverbial coals to Newcastle, for I know you are well aware of the complexity of the question: "Beyond school, what else educates?"

If I may make a guess, I'd venture that your other speakers have already reminded you that beyond school, almost *everything* educates. The family, the neighborhood, the streets we live on. The Church, business, the government. And, of course, the media. All educate us in a variety of ways.

By media, I mean some television, both educational and commercial, which is also — quote — "educational."

And I mean radio and those audio-visual aids which have done so much to enliven classrooms around the world.

And I'm not forgetting that fundamental device, the printed page — in books, magazines and newspapers. Or records, games and puzzles.

At the Children's Television Workshop, we're constantly experimenting with different media to help today's youngsters learn. One of our researchers came up with what she thought was a pretty good toy for modern kids. It was a puzzle whose pieces didn't fit together. Her explanation: the puzzle would prepare young people for the probability that things won't work out the way they want them to!

The product didn't get too far into development for kids, but it occurs to me that the subject we're tackling here could make that puzzle appropriate for those of us in the educational field.

In other words, things aren't going to work out the way we want them to unless we look around at what's available for education, including particularly the media, and make a conscious effort to fit them together for our own purposes.

My message this morning is simple:

The media, electronic and print, can be dramatically effective educational tools. And they can be even more effective when used together to enhance each other's potential.

Just over ten years ago, I began a study — underwritten by the Carnegie Corporation — of the feasibility of educating young children with television. At the time, television was characterized as a "vast wasteland."

And the most barren spot of all was the programming for children. Mindless cartoons *and* buffons *and* commercials, above all *commercials*, made up the television menu for children.

The Children's Television Workshop was created to find a way to use all of the marvelous audio-visual techniques perfected by commercial television to see and to entertain as a means of attracting children to a show with specific educational purposes. We call the show *Sesame Street* an experiment — and still is. A laboratory, if you will, for investigating the uses of television as an aid to the educational development of preschool children.

Back in 1968 when we began, we called together, in a series of seminars, more than 100 specialists in early education and child development along with writers, artists, musicians and television producers to formulate the initial curriculum goals of *Sesame Street*.

The group specified that we teach traditional skills, skills judged likely to be most helpful to the child when entering school — especially the economically disadvantaged child. We concentrated on the most fundamental skills, such as recognition of letters and numbers.

Last January, *Sesame Street* broadcast its one thousandth hour of original programming. It was vastly different from the first show broadcast in November of 1969.

We will continue to teach letters and numbers, but today we are also teaching sight words and phrases, safety and nutrition, cultural and geographical differences and attempting experiments in *affective* education.

We are taping more programs outside the studio. Our intent is to broaden the educational and cultural scope of the show by taking it to different environments where youngsters live and play and learn.

Our first venture was with Spanish-speaking youngsters and Indians in New Mexico. We have visited Long Island Sound, and we are planning a trip to the Deep South. We are currently taping shows in Hawaii.

Let me show you some typical examples of our work on *Sesame Street*, starting with our trip to New Mexico, then typical letters and numbers pieces, a short film done in Appalachia and an affecting learning piece.

A few months ago, the National Assessment of Educational Progress reported that nine-year-old Americans are reading better than their counterparts of a few years ago. Educational television shows — *Sesame Street* in particular — were cited among possible factors in the improvement in the scores.

So, scores are up. And, as might be expected, interest in reading is rising. More than 10 million copies of books based on *Sesame Street* have been sold since the show went on the air eight years ago.

Our *Sesame Street Magazine* is among the most popular children's magazines. Last year, its circulation jumped from 350,000 to nearly a half million.

I'm trying to emphasize that television can *promote* reading; that print and television need not be mutually exclusive.

A case in point is CTW's *Electric Company*. In 1970, researchers and CTW producers collaborated again to produce *The Electric Company*. Also an experiment, its aim is to teach specific reading skills to seven-to-ten-year-olds.

Here, again, we offered a blend of appealing entertainment and carefully designed curriculum. Music, animation and comedy go to work on behalf of the printed word.

Many teachers report that children who watch the show have improved their reading skills, and independent impact testing bears out their reports. This experiment has taught us a lot about how kids read and pointed the way toward helping them develop essential skills more easily.

The Electric Company is viewed by more than six million children, half in school and half at home.

Millions of children watch the programs in various forms on six continents around the globe.

Again, we combine the electronic and print media to reinforce our basic goals — to enhance our educational effectiveness. A few months ago, *The Electric Company Magazine* had a print run of 300,000 copies.

I must point out here that we don't permit advertising in our magazines because we are opposed to advertising directly to children. But our magazines do return revenues, as do royalties from the books, toys and records and other products we create. These revenues help to support our educational television programs and other educational experiments with media.

The Electric Company is also being used as a fundamental component of instruction by reading clubs and in tutorial and remedial programs. The Dallas Public Libraries have included it in their summer reading program, and five hospitals in Boston use it to tutor pediatric patients.

Here are some examples of how *The Electric Company* is using television to present print.

This fall, we embark on a new and quite different series called *The Best of Families*. It is nine hours of drama to be shown in prime time on public television, and it will illustrate the social history of American between 1880 and 1900.

Again, we dedicated great amounts of time and energy to defining our educational goals; we called in historians, social scientists and others to work with our researchers and producers so that the programs will be both entertaining and educational.

Here's the opening of the series — which goes on air October 20. The sets, clothing, speech and behavior of the three *fictional* families, set against a backdrop of real events, reflect the kind of detailed information the producers received from our researchers.

We expect to develop print materials for schools to accompany this series.

But I don't want to talk exclusively about educational television. Commercial television, the programs you see on ABC, CBS, NBC and independent commercial stations are also — quote — "educational," by accident and by design. I am encouraged by the fact that in recent years more commercial programs are educating viewers by intent.

Since 1970, CBS stations have been developing a television reading program in which youngsters read scripts before and *during* a broadcast — a direct link between the sound coming from the set and the word on the printed page. The program has enjoyed remarkable success.

In the beginning, Dr. Michael McAndrew experimented with such programs as *The Rookies* and *Sanford and Son*, using scripts borrowed from the producers and videocassette copies of the broadcasts. Later, he used programs like *The Autobiography of Miss Jane Pittman* and *Eleanor and Franklin*.

On the day of the *Eleanor and Franklin* broadcast, the *Philadelphia Inquirer* printed the entire script so the parents as well as the youngsters could read along. That day, circulation of the *Inquirer* jumped from 410,00 to 550,000.

A few days later, Dr. McAndrew canvassed 30 bookstores, most of which had stocked large numbers of the book on which *Eleanor and Franklin* was based. All but two were sold out.

What's more, for every year that youngsters have participated in the program, they have gained a year-and-a-half in reading skill.

As Dr. Michael Marcase, now Superintendent of Schools in Philadelphia, put it: "People have been knocking commercial television as detrimental to education; now we're learning to *use* it."

There are those who preach that simply watching television is harmful — that the act in itself is detrimental — more so than the content of the program.

How much do children watch? A survey made a few years ago revealed that children in the two-to-five age group spent 31.4 hours a week watching television while those in the six-to-eleven group spent 25.5 hours.

Preschool children are spending about a third of their waking hours before the television set.

I worry about excessive viewing of television.

Even if all television were good, we wouldn't want children to watch it for so many hours a day. We want them to play, socialize with peers, look at picture books when they are young, and read when they are older.

But the truth is that, at this time, in this country, little is being done to reach and teach parents — particularly poor parents — about the needs of their children. So, unfortunately, some children will be allowed to view television too much.

Thus, we must concern ourselves as educators, parents and just plain citizens with what is being televised and, in particular, televised violence.

If CTW has proven that television can teach letters and numbers, words and ideas, who can doubt television's ability to teach antisocial behavior.

And I am not against pictorialized violence *per se*. When it is shown as an integral part of the action — as in *Roots* — it serves a useful purpose. But we must question the repetitiveness of gratuitous violence on television, that is, violence dragged in to "hype" the ratings — which may hype the ratings all right but which might also harm our children and our society.

Way back at the beginning of these remarks, I said that I would like to talk — at least briefly — about the use of print, other than text books, in the classroom. Like the content of television programs, the content of the daily newspaper can be used to stimulate discussion and to motivate composition of essays and reports.

At Block Junior High School in East Chicago, Indiana, students in the American history classes subscribe to a major metropolitan daily. They are given time to read the paper in class; discussion, group projects and quizzes follow.

Again, students are urged to take the paper home to motivate family discussion. The teachers who developed the program report that reading scores have improved.

Interestingly enough, positive results tend to appear first among the females. What lesson there is in that bit of intelligence for newspaper publishers, I cannot guess.

We at CTW have been experimenting with the creation of multi-media materials for use in the classroom: sound filmstrips, audio tapes with complementary activity books, games, and other materials. They are designed to enhance the effectiveness of *Sesame Street* and *The Electric Company.*

We are particularly pleased that the material is produced in Spanish as well as in English, and that it can be used in the education of the handicapped.

In a few years, more classrooms will doubtless have access to cassette players and cassettes, to closed circuit television systems, to motion picture projectors, and to television sets themselves. A multi-media approach to education will become technically and economically feasible.

CTW, and many other producers already in the field or yet to come, will be stretched to their limits to provide multi-media aids to teachers. By the same token, the home, too, could become a more formal learning center with easy access to education, how-to, cultural, and quality entertainment video materials.

Potentially, the impact will be as great as the printing press itself.

But the content for all this technology will be no better, no more tasteful, no more educational and no more pro-social than those who produce it.

And that, indeed, must give us pause. We will need a lot of people, both in education and outside, and in and outside federal, state, and city governments dedicated to a better idea than a quick dollar and the lowest common denominator.

There's a road sign in rural Vermont that reads, "Dangerous," and goes on to say, "Pick the right rut because you're going to be in it for the next 15 miles."

In a sense, the uses of television — and other media — for educational purposes was in the wrong rut during the first generation of the medium. Only in recent years have we begun to dispel the myth that television is for entertainment and the classroom is for learning. Now we know that such polarization is wrong and damaging to educational progress, especially as demands accelerate for better education and greater access to knowledge through a variety of media.

I believe we now have enough experience to be confident that — with continued study and experimentation and a greater national commitment to educational success for all children — we can put television and other media to work to enlighten the present generation and educate the next one.

There is enough potential there for us to feel, like Pogo, that we are "surrounded by insurmountable opportunities."

FILM FOR SUMMER INSTITUTE CHIEF STATE SCHOOL OFFICERS

Traverse City, Michigan
1 August 1977

New Mexico Opening	1:33
Martian Beauty #9	:57
Appalachian Mailman	2:20
Bert and Ernie Typewriter	1:40
Lena and Grover	3:34
Total:	10:04
5 seconds of black	
Electric Company Opening	:47
Silhouette Blend	1:15
Smile	:50
Phantom of Love	1:55
Giant Person	1:00
Total:	5:52
5 seconds of black	
Best of Families Opening	3:01
GRAND TOTAL	18:57

Chapter IV

THE ARTS AND HUMANITIES AS EDUCATORS: Orchestrating the Dream.

Thomas P. Bergin
Dean of Continuing Education
University of Notre Dame -
Chairman, Artists-In-Schools Panel
National Endowment for the Arts

It was with considerable interest and enthusiasm that I accepted, some months ago, your kind invitation to be with you today. I welcomed it primarily because I thought of it as a challenge, an opportunity for me to be able to share with you some of the marvelous happenings I have witnessed in arts education in the public school system over the past few years.

I have felt all along, that you would appreciate my sharing with you some of the thoughts I have concerning the National Endowment's Artists-in-Schools Program and arts eduction in general.

My reason for being here stems primarily from the association, insight and enthusiasm I have experienced in arts education over the past seven years as a member and chairman of the Indiana Arts Commission and currently as chairman of the National Endowment's Artists-in-Schools panel, a responsibility I have held for the past three years.

As a prelude to our discussion this afternoon, I would like to present a very short film which, in a brief and vivid way, describes one of the National Endowment's programs bearing directly on the subject of the arts and humanities in education. It is the Artists-in-Schools Program. I think you will enjoy the film.

FILM: ARTISTS-IN-SCHOOLS ... IN YOUR SCHOOL

Film Dialogue ...

***and I awoke and it was
true
I saw everything I saw
sky of roses house of daisies
a tree of orange a book of
apple and
I loved it all and I lived with
it for the rest of my life

This child was in the habit of coming to school 2 or 3 days a week, just putting in time. Then we had a sculptor, a guest artist. We gave him a clump of clay and you would not believe it. The child has really found himself and he has not missed a day of school since.

Children go to school certainly to learn the intellectual fundamentals. But more than that, children go to school to learn about the world beyond home and to learn to make observations and valid judgments about the world, to learn to make choice esthetic as well as practical; in short, to prepare for a rich and full life.

A school is a fact factory. It is where children begin to learn about themselves, to perceive others, and to express what they see and feel. Artists-in-Schools, sponsored by the National Endowment for the Arts, was developed in cooperation with the U.S. Office of Education, State Arts Agencies, State Departments of Education, and local school districts. It is a program aimed at expanding children's perceptions and in helping them to express themselves through the arts.

It began in 1967 with a few poets working in the schools. During the past 4 years, Doug Anderson was a guest poet in schools in several states across the country.

Generally, a guest poet is invited to a school for a week. During that time he reads a little of his work, perhaps some work by students in other schools, and then tries to get the students writing themselves—doing it, reading it, sharing it with their friends.

When we ask children to use their imaginations, we might well assume that they are going to use them in very childish ways. I have often found that the creative ingenuity, the imaginative power of persons 10 or 12 years old is often as great, perhaps greater, than at any other time during their lives.

In 1969 six pilot projects across the country brought visual artists into the schools. Success built upon success and today more than 1 million students and teachers are participating throughout the 50 states and in five special jurisdictions from Sarasota to American Samoa, from Fairbanks to the Outerbanks.

Beginning with a modest budget in 1969, the program has grown to more than $3.5 million a year. It includes nearly 2,000 professional artists now at work in the schools. They are dancers, musicians, poets, actors, film-makers, photographers, folk artists, craftsmen and craftswomen, sculptors, painters, potters, architects, and environmental designers. Although many teach the arts, the artist is not expected to be a teacher only. He is an artist doing what he or she does professionally, where the students and teachers can watch and share in the experience of creative work. They learn firsthand about people who earn a living through words, or shapes and colors, or sounds, or movement.

Not every child will become an artist; that is not the purpose of the program. Each child has an opportunity to discover his own imagination, to discover his own natural desire to create, to express his own feelings in his own way.

It is misleading in a sense to consider artists-in-schools a Federal program. It is instead 5,000 local programs, each one different, each one unique, each one special.

If a school or a community wants to participate in a program and wants to share the Federal funds, it applies to the state arts agency. That agency, in turn, applies to the National Endowment for the Arts for money to help honor the Artists-in-Schools projects in that state. Together the state agencies at each local school select a program and recruit a professional artist. The success of the program depends largely on the artist. He must be a special kind of person as well as an able professional.

In many states a special panel is formed and consults with the arts agency in participating schools to review programs and select the artist. A typical panel in the visual arts, for example, might include the state arts council director, the arts supervisor for the state public school system, a curator from a museum or gallery, a practicing artist or craftsman, and the president of a local crafts or arts council.

The artists then works in residence at the school—a new and exciting resource for the students, the teachers, and the community as well. He can work with the students singly or in groups outside the regular curriculum. He works with the teachers holding workshops where they can watch him work and explain his art. He works with the community doing poems or pottery, giving recitals or shows, offering his art and his expertise. The length of the residency depends upon an artist's discipline.

A company of dancers, for example, might only be in residence for a couple of weeks giving performances, conducting workshops, teaching classes, showing the school or a community that perhaps had never seen professional dancing before, what the art of dance is all about.

A painter or sculptor typically sets up his studio in the school and may stay for months.

The most successful projects are the ones in which an artists becomes a part of the school and the community, and that takes time.

It is hard to describe a typical artist-in-school project because each one is designed to meet a specific situation. Following the endowment's general guidelines, the artists and school design a project best suited to their particular needs and resources. The state arts agency acts as an adviser and coordinator.

The real direction, the real energy, comes from the people involved—creative administrators, teachers, students, and parents. Most important, everyone learns about an art form in a direct and intimate way from the working artist, himself. The children, many of them, for the first time learn they can express themselves through art and learn that they have unique things to say. The creative urge is universal. Their own special way of seeing and doing has value.

There have been hundreds of successes where the program just does not add a new curriculum or decorate the walls of the school. Many children, adults, and communities have already benefited from the works of the program. An artist-in-school awakens everyone to the choice of creative work, to the excitement of new perceptions and the pleasure of personal expression.

It doesn't really matter when you are trying to be creative whether you get high grades or low grades. It really doesn't matter. Everyone has an imagination.

The artist-in-school confirms that there is something of the artist in each of us, especially when we are children and art is all around us to see, hear, or feel. Each of us can learn the art of perception, the art of expression, through words and sounds, colors, and motion, if given the opportunity. What better way is there than by bringing the artists into the schools. Bring them into your school.

The spirit, sight and sound, color and movement we have just experienced delivers its own message. These represent the very foundation of the arts in education. Because our senses are engaged, the ideas and concepts of the film are brought closer to the real-life experiences they aim to embody. It is just such an exercise, involving feelings, the affective side of our lives, which the arts are so uniquely capable of, and which makes their place in education so crucial.

For just a few moments I would like to focus specifically on some of the contributions which I feel the National Endowment's Artists-in-Schools Program has been making to our artists, our children, and communities throughout the country.

I honestly find it difficult to exaggerate the significance, the impact, and the tremendous rewards which I believe have been accruing to the young people of our nation through the Artists-in-Schools Program. It has created a whole new dimension in their sensitivity and awareness to the arts and the role that art should play in their daily lives. In my own mind, I see this new experience for the student, instinctively and very quickly, equated to the whole concept of joy — and as Teilhard de Chardin has so appropriately put it — "Joy is the most infallible sign of the presence of God."

It is with the word "joy" that I would like to quickly present some of the first-rate activities, and what I feel are almost miraculous transitions, currently taking place in classrooms and schools throughout this country under the name of the artists-in-schools. For it is precisely this sense of "joy" which is badly needed in our schools and, indeed, in our general concept of education. It is this sense of joy in education which artists-in-schools, along with many other new and imaginative programs, has succeeded in bringing to our educational process.

In the words of one Alabama educator describing his reaction just recently to an artists-in-schools residency within his school, he said ... "After 33 years in education I'm seeing for the first time something truly new and exciting. I can't imagine why this wasn't done 200 years ago." This year, in over 6,000 schools throughout the nation, educators, children, parents and communities are voicing similar reactions to this exciting and innovative program in basic education.

As you know, the Artists-in-Schools Program is an attempt to make change possible within the school structure itself by incorporating the arts into the standard curricula.

At the core of the program is the firm belief, consistently echoed by a substantial number of prominent educators and administrators, people like yourselves, that the experience of art is basic to the human spirit and that it should be offered to all children as an essential part of their educative process. The hope and dream is to expand the personality of the child, develop his/her emotional attitudes and receptivity to the processes of learning ... to instill in our young an awareness of creativity as a living and personal process that will endure long after their formal education is completed.

It is, ladies and gentlemen, a hope and dream which, before our very eyes, is coming to fruition in thousands of classrooms across this nation, a quiet "revolution" in which are contained the seeds of some of the most profound and pervasive changes ... changes which can touch all of our lives ... most importantly, touch and enhance the lives of our children.

A few weeks ago, I received a letter from a colleague of mine, a member of the faculty of a prominent university in the east, which says something about this program, and I would like to read from that letter.

> "Tom,
>
> About two months ago I was one of those asked by the Office of Education to read applications for their new program in support of the arts in public schools. Time after time the applications which I saw made reference to participation in the Artists-in-Schools Program and I gathered from the many who wrote in that this program is beginning to have major impact on public school education in the arts.
>
> As you know, many public school teachers of art, music, drama, etc. raised objections to the program when it was first launched because they felt that persons not trained to work with children were usurping their functions. I believe that just the opposite has now been proved, namely the impact of these visitors is such that they generate additional interest in and support for the arts in the schools.
>
> The National Endowment for the Arts Program continues to serve the function of stimulating the development of public school programs in the arts and it seems to me that the applications I reviewed, which came from all pats of the country and school systems, carried that message home very clearly and forcibly."

It is indeed a dream which is becoming a reality in California, where the Alvarado School Art Workshop has dramatically enriched the arts curriculum of participating public schools, as well as creatively transforming many of the physical settings in which this art takes place.

The program is designed to utilize the talents of professional artists working with children in cooperation with teachers and administrators to increase the students' experience with creative arts in molding a new physical environment.

Working within the common framework, the program retains the flexibility which allows schools, teachers, students, and parents to decide what resources of the Alvarado Program are best suited to their particular needs.

It is my understanding that it is becoming a reality in East Lansing, Michigan, where a commitment to the artists-in-schools concept was the catalyst for the establishment of a permanent "creative dance movement program" in grades 1-5, of all nine East Lansing elementary schools.

It is happening in Portland, Maine, where the full-residency of a sculptor created a major breakthrough to involve the arts as a dynamic, creative force in vocational education, indeed providing us with a brief glimpse of the tremendous potential of the arts in *all* areas of the educational system. There are many other fine examples and, again, they are not confined to the Artists-in-Schools Program.

Under another category of the endowment's education program, *Learning Through the Arts*, it is happening not only in the schools, and not only for the young, but also in projects outside of the schools and in communities across the nation helping to further demonstrate that the arts do change the face of education and present an exciting new way of learning.

In Boston, for example, aging, infirmed and disabled persons in over 40 nursing homes in and around the Boston area have had their lives enriched and renewed by *The Learning Guild*, a mobile arts education program which brings arts programs and workshops directly to the doors of those so often neglected and discounted by the more vocal elements of our society. As part of this program, an 80-year-old former dress shop owner at the William Francis Nursing Home in Cambridge created a line of puppets made from cardboard tubes, styrofoam, and strands of yarn, tapping within herself a source of creativity and joy which might well otherwise have gone unnoticed and unexpressed.

In California, talented and bright, yet neurologically handicapped children of the Full Circle Residential Center have been placed by *The Growing Mind*, in a crafts apprenticeship program intended to involve them in meaningful careers in the arts through a training program of high artistic quality. Artists from the nationally-known Bolinas Craftsman's Guild work with the children in an approach which stresses nutrition, physical therapy and special academic remediation within the context of serious artistic training.

As exciting as all of these are, they are really only scratching the surface ... there are millions more of our young people to be reached. The artists-in-schools approach, in a very particular way, is providing for the long neglected role of the professional artists as a dynamic and life-giving force in the educational process. In classroom after classroom, that naturally symbiotic relationship which exists between the arts and education — (with artists everywhere receiving inspiration and creative energy from our children, and children everywhere being exposed to the tremendous creative potential of their own lives) — is being revealed to us as the catalyst for what may well become a new and highly innovative approach in American education ... an age in which joy and learning, euphoria and discipline, creativity and knowledge, progress and traditional education are no longer seen as antithetical concepts, but as partners in a renewed commitment to a philosphy of education which is as old as the Greeks — that truth and beauty are one and the same, and are best attained when the human spirit is free to come to terms with the creative impulses which are its rightful destiny.

None of us here need to be convinced or converted — we are unreservedly committed — our problem for the most part is ... *how* do we get there effectively, economically and politically in a reasonable and meaningful way.

I think I have some reasonable observations and recommendations to make which could be helpful ...

Over the past two years I have been serving on a national study panel focused primarily upon assessing the signifance of the arts for Americans, and more specifically, education. The twenty-five members of this panel, chaired by David Rockefeller, Jr., took their work very seriously. They were selected not for their professional experience in the field of arts education, but rather for their concern about the arts, their concern about education, and their concern for the way Americans live. The panel was originally entitled, Arts, Education and Americans. On May 24 of this year with scheduled congressional hearings and a national conference in Washington our report was made public. It is entitled, *Coming to Our Senses.* If you have not already received a copy of this publication — *Coming to Our Senses* — I know you will very shortly as I made sure your name was on the list.

With some modesty, and yet as one who worked hard on this report, I urge you to read this document carefully — it is accurate and it represents an immense distillation and synthesis of the total picture of the arts in education programs now under way around the nation, it also presents very clearly a forceful case for "the power and urgency of arts education" in the lives of all Americans. The report is filled with moving evidence of the need for learning in, about and through the arts. There are fifteen major recommendations with some 96 supplemental ones stemming from the major issues.

I will not distress you by attempting to highlight these recommendations as I feel you will welcome the opportunity to do so, quietly and reflectively, once you have the full report as background.

There are, however, three very solid principles which underline the fifteen major categories of the recommendation — and I think it is important to mention them here.

1. **The fundamental goals of American education can be realized only when the arts become central to the individual's learning experience, in or out of schools and at every stage of life.**
2. **Educators at all levels must adopt the arts as a basic component of the curriculum deserving parity with all other elements.**
3. **School programs in the arts should draw heavily upon all available resources in the community: the artists, the materials, the media, and the total environment — both natural and man-made.**

In moving to embrace these principles, it seems to me, one of the first big problems to be resolved concerns the dispersion of responsibility and duplication, and/or fragmentation, of effort among those federal agencies which administer the major legislative programs in arts education. This problem is placed in perspective in a well-focused statement contained in the report *Coming to Our Senses.* That statement is as follows:

> **Since the early 1960's the federal government has played an increasingly important role in developing ideas and initiating new programs. As a rule, federal agencies have influenced art programs by providing financial guidelines. Predictably, the rapid growth of federal involvement has been acompanied by a dispersion of responsibility among a number of separate federal programs and agencies. Despite the creation of coordinating bodies, there are significant duplications of effort in some situations and serious ommissions in others ...**

It is fair to say that similar problems exist between and among the major assocations of arts educators and the private foundations operating in the field. Adquate communication mechanisms within the federal establishment and among the private associations must be greatly improved and strengthened. The time is now because the appropriate environment exists.

The education programs within the National Endowment for the Humanities have from time to time supported significant studies of the role of the arts in humanistic studies. However, the focus usually has been more concerned with the study of the arts than it has been with their practice. The Humanities Endowment has assisted in curriculum development activities which included the arts in interdisciplinary instructional programs and has, of course, supported projects aimed at improving elementary and secondary school teaching in the humanities.

As you look at the various existing programs and activities, there is no escaping the fact that no serious rational, coordinated plan has been designed to deal with arts education in the long run. The pattern of support has evolved haphazardly. There has been no serious systematic analysis of all the components which together make up the extremely complicated arts education picture.

Over time, separate legislative actions have taken place, as one agency or another has pressed for a particular action. Once a new program becomes established it seems to have grown unilaterally without much attention being paid to objectives and program goals or funding policies.

It is obvious, the lack of a sound, identifiable policy structure has contributed substantialy to confuse many at a variety of educational levels, including those in the federal agencies and in the Congress.

One of the recommendations made by the Arts, Education and Americans panel in its report, *Coming to Our Senses*, could remedy this in some measure. It calls for the establishment of a "National Arts Education Leadership Program," one which could include a broad spectrum of arts education allies: that is, "school administrators, education curators in museums, and the education directors of other arts institutions, education program directors of state and local arts councils, project leaders, and those educators engaged in 'arts education leadership positions at the state, regional and district level'."

Surely, this country is well behind other educational systems in the utilization of the arts as an educational resource. For example, in China and in Russia as part of their national arts educational program, arts education is woven into and used in the basic fabric of the educational process. They understand how to make the arts work for educational purposes, particularly early education. They believe arts education does not work in isolation; it must be integrated early on, into the education process.

Perhaps such a national educational leadership program, as described in *Coming to Our Senses*, might permit us to move more quickly toward establishing a strong national posture concerning the arts in our educational structure.

In appraising the current situation ... attempting to determine how we get there effectively, economically and politically in a reasonable and meaningful way, I would like to present some of the elements which I view as strong motivational forces which are currently at work, and which ultimately could provide for vast and sweeping changes in arts education if they were carefully and delicately orchestrated.

Again, drawing upon my personal experience and association with the state arts agencies and the National Endowment for the Arts, I honestly believe we are on the threshold of some significant breakthroughs in art education on a variety of levels. There is a new mood — a new wave of the future in which many of our good schools are acquiring greater understanding and appreciation of what giftedness is all about — a new sensitivity to artistic interpretation and in identifying all of the various talents among our young. They are beginning to think of art as a process and not just a product. We must keep this new spirit alive and encourage its advancement.

My optimism and, indeed, my rationale for this anticipated rebirth for the arts within our educational system is focused upon the substantial changes which are already under way ... at the federal, state and local level, all of which can generate effective change. Let me just comment on a few of these.

There is genuine interest and a new motivation at the national level. At the present time Congress has every intention of becoming more involved in the arts, specifically as they relate to the education of our young.

The recent Congressional support for the National Endowment for the Arts and Humanities provides further evidence that this commitment will grow and become a substantial part of national policy.

I can think of no better way of presenting the spirit and future action we might expect from Congress than to read to you the message my good friend, John Brademas, asked me to present at this meeting.

> **I was very pleased to learn that the Chief State School Officers had invited my constituent and good friend, Tom Bergin, to deliver a paper on "The Arts and Humanities as Educators" at their annual meeting, for as chairman of that subcommittee of the United States House of Representatives with jurisdiction over the arts and humanities, I have taken a particular interest in the endowment's efforts to encourage a greater appreciation for the arts and humanities in elementary and secondary school pupils.**
>
> **I congratulate the Chiefs on their attention to this extremely important subject and assure them of my continued commitment to this vital component of education.**

The President, his Cabinet and the executive offices are also very much interested and intend to be continually involved in the arts. At the cabinet level, the Department of Health, Education and Welfare, and the Office of Education, there is clear indication that there will be some changes made. As a matter of fact at a recent meeting of the arts held at the Museum of Modern Art, Mrs. Joan Mondale said:

> **This administration is devoted to broadening the base of support for the arts, and the best way to accomplish this goal is through the recognition that the arts have a place in all areas of our lives — they are part of our total environment.**

I believe we can expect good support at this level and we ought to make sure that it is intellectually interpreted and effectively administered.

Within the National Endowment for the Arts itself there has been a continuing evaluation and reassessment of the various programs in education. The chairman, Nancy Hanks, has been very conscious of this need and continues to seek resources both human and financial in trying to provide sutantial growth and improved opportunities for the arts in education.

In turning to the state level ... may I say — right off — that there are many here in this room who have been quietly and imaginatively moving mountains in relation to the arts programs within their own particular states.

In many of the states this quiet revolution has been underway for some time and it is indeed succeeding. The Ad Hoc Coalition of States under the JDR 3rd Fund has been a significant part of this movement, along with many other special programs which have been initiated within the individual states.

There are several states which might be cited as exemplary models of progress in the arts. My own state of Indiana and, indeed, the tremendous accomplishments Harold Negley has succeeded in bringing about could well represent one such exemplary model.

However, lest you think I was being too provincial, I decided to go west, and selected the state of Washington, a state which, it seems to me, has made some truly significant strides in arts education.

Back in 1966, the State of Washington initiated the *Cultural Enrichment Program*, which was funded initially with Title III monies and later funded entirely by legislative appropriation to the Office of the State Superintendent of Public Instruction. The program consists of performances in schools throughout the state by such professional groups as the Seattle Symphony, Spokane Chamber Orchestra, Seattle Opera, Seattle Repertory Theatre, First Chamber Dance Company, plus performances by many smaller musical, theatre, or dance ensembles. The program also tours the state artmobile, which presents visual art collections including original works by Mark Tobey and other famous northwest artists, as well as crafts and North Coast Indian art. The program has been funded at approximately $500,000 annually.

The State of Washington has an *Artists-in-Schools Program* which in many respects is similar to those funded in the other states. However, it also includes an outreach program that serves small rural schools in the plains of eastern Washington with week-long residencies.

The State of Washington also has, through *The Centrum Foundation*, a series of 20 week-long workshops for the state's creatively talented students. The workshops include music composition, modern dance, theatre, visual arts, poetry. All workshops are led by professionals in the arts including nationally famous persons in poetry and in the dance. The program budget is about $125,000 annually and is funded by the Gifted Division of the Office of the State Superintendent of Public Instruction, the National Endowment's Alternative Education Program, the State Arts Commission and local school districts.

About four years ago, in the State of Washington, a special project entitled *Arts for the Handicapped and Very Special Arts Fairs* was organized and funded by federal, state and special education monies, about $100,000 per year. It serves mentaly and physically handicapped youngsters from throughout the state and is now being replicated nationally.

Currently underway, the state has a *Comprehensive Arts in Education* project with up to 27 elementary schools which have been selected to become model sites for the infusion of the arts in basic education. As I understand it, the state will provide modest seed money and technical assistance. Funding will depend on a strong local effort.

I think it is important to point out that the State of Washington Legislature recently passed a description of basic education for purposes of state school funding. The description includes music and art, K through 12, as basic learning areas.

All of this concern and commitment for the arts in education is taking place in one of our states ... the State of Washington. It is happening in others — and it ought to be happening in all.

Many of the states have or are currently considering a specific line item in their budgets for arts in education. This is a terribly important concept and movement, a great alternative from having to rely on the traditional process, of the availability of discretionary funds — funds which ultimately are never quite so available or discretionary.

It is fair to say that in most instances the states have been very cooperative and anxious to participate in the arts program opportunities provided by the federal government, regardless of how modest these funds might be.

For example, the Arts Education Program of the United States Office of Education, in section 409 of the Education Amendments of 1974, authorized a minimum of $750,000 each fiscal year "to encourage and assist state and local education agencies to establish and conduct programs in which the arts are an integral part of elementary and secondary school programs."

All would agree, $750,000 is not a great amount of money spread over 50 states, and yet it has been, I believe, effectively used. In June 1976, 89 grants were made for 45 state level projects and 44 local level projects in 31 states. Last month (June 1977) 77 grants were made for 30 statewide projects and 47 local projects.

So far most state and local projects concentrate on training those who bring the arts to children — classroom teachers, artist-teachers, professional artists, arts specialists, and administrators. Most use artists in some capacity—to demonstrate a particular art form, to help plan, to advise.

Many state education agencies are involved in statewide arts education planning or offer assistance. Grants have provided for workshops, newsletters, mini-grant programs, or just a few yearly meetings to bring together arts and education representatives at the state level. Some state agencies had well established visual art and music programs, but needed to introduce dance and drama, to teach them as part of language arts or reading. Some concentrated on developing arts curricula.

Many of these projects had substantial backing from state education departments or school districts. Some had funds from state or local arts councils, from the Artists-in-Schools Program, and from private sources.

Another very significant and dynamically expanding opportunity for arts education at the state level is represented by the state arts agencies or commissions.

The growth, strength and commitment of our state arts agencies, over the past ten years, is in itself a phenomenon. While they stumbled and fumbled in the early stages and did not always have effective leadership and adequate budgets, they have indeed come of age. These councils today, for the most part, represent serious people committed to the arts, intelligent people who consistently look for a good working partnership with state and local educational systems toward greater extension of the arts. They have revved up support from their state legislatures and thus have succeeded in securing more appropriate budgets to accommodate the cultural needs within their states. Nationally, their budgets total over $50 million, and that $50 million is up from $5 million ten years ago. Along with this increase has come matching funds from the communities. In many instances they are over-matched.

Today, for the first time — fiscal year 1978 — states have appropriated more money to state arts agencies than the federal government has in the past. Historically, it has been the other way around.

One really important aspect of this growth and development focuses upon the fact that virtually every state arts agency is currently working closely with some local public school systems and providing community support for expanding arts and community programs in the public schools. Their flexibility, staff and general commitment to the arts in education represent valuable allies in demonstrating public support for expanding arts in education programming.

This coalition of citizen support from outside, along with faculty and administrators' support from inside, is a very strong coalition and, not infrequently, a coalition which can be made to work for the state department of education in cooperation with the state arts agencies.

In many states, the state arts agency is allocating better than one-third of its arts programming funds to arts-in-education projects and programs. School administrators at the state and local level have shown a great deal of professionalism in handling this new support and as a result the program is highly respected within the educational community ... a situation which in the past might have been highly politicized.

Another strong force working in support of arts in education is focused upon the growing number and the effectiveness of community arts councils. Five years ago, community arts councils numbered 300. Today, it is estimated that there are more than 1,500.

In the communities themselves, through the schools and the local arts councils, there has been generated new sensitivity and motivation which is enriching the arts in a variety of ways within these communities — in and out of schools — with the old and the young — among the infirm and the underprivileged. The councils have created a new wave of interest in the arts and the joy which they bring to the total community. Many of these community arts councils have substantial funds and human resources available which can frequently be of great service to the public school system through direct community contacts outside the educational establishment. They can reach parents and other members of the community in securing support at the voter level for expanding arts and humanities programs within the state department of education and/or the local system.

Within these same communities corporate giving to the arts has also expanded tremendously, and in many instances this support goes directly to community arts education programs.

This represents a significant amount of money; over the past 10 years corporate support of the arts has moved from $22 million a year to $221 million in 1976.

These, then, are some of the areas and forces where change is taking place — changes which augur well for improved arts in education. I believe they are strong forces and that they represent opportunities which we have not had in the past. As some of these changes continue, their objectives and commitment refined, they cannot help representing a strong force for the changes all of us would like to see take place.

I am sure we would all agree there is a tremendous number of divergent parts and components which must be carefully assembled into this mosaic.

It is not an easy task and yet the promise it inspires, like the artist in his painting, should move each of us to go the full mile and try to make it happen.

CHAPTER V

THE EDUCATIONAL EFFECTS OF NUTRITION

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When I first saw the title assigned to this session, *The Educational Effects of Nutrition*, I assumed I was being asked here to discuss a topic which has had a great deal of press in the last decade — namely, does a child's nutritional status — affect that child's performance in school? And if so, how? I understand that you need to know the answers to these questions, simply because so much has been said and written about poor children brain-damaged by poor diets.

But I have in recent years become more concerned about a problem which underlies questions relating to nutritional status and behavior — and which clearly has much broader implications for this and other socities: namely, who is teaching our children what to eat and is that education appropriate? Since the overall topic of this series of presentations is *Beyond the School — What Else Educates?* I feel justified in asking that question about food. What is society teaching children about food? What, if anything, are your schools teaching them? And is there anything any of us can do about it?

So I am going to begin today by discussing the educational effects of nutrition and end by discussing the nutritional effects of education. I think you will find the first part a little boring but optimistic; I trust you will find the second part amusingly depressing.

Let me start with some basic definitions. Nutritionists do not — or should not — use malnutrition and hunger interchangeably. Malnutrition is a state which can be clinically or chemically defined — by a symptom complex like anemia, for example, or by a low level of a nutrient in one of the body fluids. Hunger, on the other hand, is a state of physiological and psychological discomfort associated with needing — or wanting — to eat. A very hungry person may or may not be malnourished — she may merely have missed dinner the night before — while a severely malnourished person is often too sick to be hungry. My initial focus here will be on malnutrition.

What is known about the effects on humans, especially young humans, of obtaining inadequate or inappropriate food? The question must be asked even before birth. That is, does the mother's nutritional status during pregnancy affect the mental competence of the child she bears? We know that poor women are likely to be less well-nourished during pregnancy than women who are not poor, and that their children are likely to be less healthy and to score more poorly on intelligence and achievement tests. But are these facts related? Does nutritional stress in mothers-to-be negatively affect the mental development of their offspring?

There are two scientific ways to test such a relationship, directly or indirectly. You can test it directly by altering the mother's nutritional status — either by starving or by supplementing her — and then look to see if there is a parallel alteration in the mental development of her infant. It is obvious that there is only one direction in which we can make use of this method experimentally. We cannot in good conscience deliberately starve pregnant females. But we can supplement their diets and see what happens later to their children. Such a study was done about 20 years ago.[1] Women were given various dietary supplements in pregnancy and several years later the IQ's of their children were tested and compared with those of a group of children whose mothers had not been given supplements. The results were marginally positive; the scores of children from one supplemented group appeared to be modestly affected, the scores of children from the other supplemented group did not. In fact, the study was uninterpretable because of all the unaccounted for things that happened between the time the mother was handed her supply of vitamin pills and the time the psychologists tested her child's IQ.

Much more recently, a direct experiment of the opposite sort — the kind I said couldn't be done — was reported. It involved starving pregnant women; so it was euphemistically called "an experiment of nature" — really the by-product of man's inhumanity to man, and woman. The investigators looked at the adult intellectual status of a group of individuals whose mothers had been severely undernourished during pregnancy — specifically during the "hunger winter" in Holland toward the end of World War II, when the Germans abruptly cut off food supplies to several Dutch cities.[2] Because the resulting famine was brief (the Allies came to the rescue by Spring) and because it had a clearly defined beginning and end, and, finally, because Holland's continuous records permitted follow-up of persons born in this famine period, the researchers were able to examine the adult intelligence of persons born to mothers malnourished during various trimesters of their pregnancies. No differences in adult intelligence associated with maternal malnutrition were found. I should hasten to point out that this cannot be interpreted to mean that prenatal nutrition is unimportant. The population involved here was quite well nourished before the famine began, and all the infants were rehabilitated before the end of their first year of life — since the famine had by then ended. Unfortunately, these are not the conditions under which poor mothers characteristically bear and rear their infants in peacetime.

This sort of direct test is clearly very awkward to carry out. Fortunately, there is an indirect way to examine the maternal-diet-infant-development relationship — using a kind of "House That Jack Built" model. That is, if you can show that poor diet in pregnancy is associated with excess abnormalities of pregnancy and birth; and if you can also show that such abnormal pregnancies and births produce excessive numbers of children who are physically and/or mentally handicapped, it is then possible to argue confidently that mothers' poor diets are a hazard to the development of their infants.

Without reviewing the supporting evidence, let me say simply that both these statements turn out to be true: complicated pregnancies and births do increase the risk of handicap in children who are their products, and maternal malnutrition does produce an excess of pregnancy and birth complications. The evidence is clearest where low-birthweight is concerned.[3] Both the mother's height, as it reflects the adequacy of her own childhood nutrition, and the mother's weight before she even conceives the baby appear to affect birthweight. So does her weight gain during pregnancy, a fact which has led to a number of productive studies.[4]

For as these relationships between weight-gain, premature births, and mental handicap began to be clarified in the late 1960's, a number of investigators initiated intervention studies, studies in which supplemental calories and other nutrients were supplied to high-risk pregnant women to see whether their incidence of low-birthweight babies could thereby be reduced. Results from these studies indicated that birthweight could indeed be significantly increased — and the risk to the infant thereby decreased — if mothers were provided with extra food while they were carrying the fetus.[5] Thus the available evidence clearly supports the notion that if we care about giving children a fair start intellectually, we need to worry about the nutrition of expectant mothers. Indeed, the evidence has been sufficiently compelling as to have helped generate in 1972 a program which now provides supplemental foods to almost 900,000 poor pregnant and nursing women and their young children. Though no definitive evaluation of the effectiveness of the WIC Program (Women, Infants and Children) is yet available, preliminary data clearly suggest that WIC *is* raising birthweights among the children of participants — and thus accomplishing its goal of lessening those children's risk of handicap.[6]

What about the infants and children themselves? What does the scientific literature tell us about the importance to their mental development of providing them with optimal diets? Surprisingly little, partly because we don't know how to define an optimal diet. Since the topic of the limits of nutrition science will be important later on, let me elaborate a little here about what we do and don't know. We know that undernutrition or malnutrition, depending upon its severity, the age of its victim, the victim's history, and the nutrients involved, can produce a range of symptoms. In severe deprivation there may be clear-cut diseases or symptom complexes such as iron-deficiency anemia (found predominantly among children and premenopausal women) or xerophthalmia and kwashiorkor (diseases of vitamin A and protein deficiency respectively which are seldom found at all in the U.S.). Less severe deficiency can produce a reduced growth rate in children — apparently without necessarily producing any other clear-cut clinical symptoms. And finally, where deficiency is minimal, there *may* occur a variety of conditions which might be called, for lack of a better term, "suboptimal health."

How do these various deficiency states affect persons who suffer from them? At the suboptimal health end of the scale, we hardly know how to define malnutrition, much less specify its effects on physical or mental functioning. We haven't established "normal" serum levels for many nutrients so that we cannot say whether a particular person deviates from normal —

or whether it would be significant if he or she did. This is what makes nutrition such a fertile field for creative minds. Most of us, for a number of reasons, fail to feel perfect *so much* of the time; and *so little* is known about what "hidden hungers" (as the ads call them) might feel like, that someone is always ready to make a buck telling us that Vitamin E or Vitamin C, or Fiber, or Selenium — or Coca Cola — will make us feel terrific.

What about the next level of malnutrition — the chronic sub-nutrition that produces a reduced rate of growth in children? How ominous a sign is that as far as mental development is concerned? The hypothesis that there is *some* link between physical growth and mental development has a long and fascinating history,[7] but the nature of that link is not clear. Growth rate in children has long been used as an indicator of nutritional adequacy — the best fed children grow the fastest[8] — so attempts have been made to relate size, as a reflection of growth rate, to various measures of intelligence and/or behavior — in order to demonstrate the effects of chronic malnutrition on intelligence. In countries where both severe malnutrition and severe growth retardation are commonplace, there is some evidence that the height-intelligence relationship holds,[9] but not in this country. Among groups of poor children here, the shortest children do not appear to have the lowest IQ's nor the tallest ones the highest.[10]

Here as elsewhere, however, growth retardation, like poor school achievement, is often found among children from low income families, children who are exposed to a variety of stresses other than, or in addition to, nutritional ones. This is the very reason it is so difficult to sort out the mental effects of infant and child malnutrition from the other accompaniments of poverty. Children likely to be ill-fed are likely also to be exposed to more complications of pregnancy and birth, more illnesses which exacerbate and are exacerbated by poor nutritional status, poorer housing, poorer sanitation, less well-educated parents, poorer learning opportunities and so on. In short, the risks for a poor child are multiple, interactive and probably cumulative, so that separating out the effects of a moderately inadequate diet from the other hazards of poverty becomes virtually impossible.

When one gets to the severest end of the possible range of nutritional stresses, the effects of childhood nutrition *per se* become clearer. Certainly the interaction between nutrition and disease becomes more obvious. Among severely malnourished children vulnerability to disease is high and it is often an infection — measles or a bout of diarrhea — which precipitates a child from a state of chronic malnutrition into the life-threatening condition known as kwashiorkor. It is children malnourished, or formerly malnourished, to this degree who have been the subject of most of the major studies of the effects of nutritional stress on mental development.

These studies, done on severely malnourished children are — on the whole — simply not relevant to the U.S. Malnutrition of that degree of severity is, fortunately, rarely found here. But it is important, nevertheless, to look at what these studies reveal. Despite the initial shouts of alarm about the permanency of the mental retardation associated with childhood malnutrition, the data are not at all clear cut. The evidence suggests that unless malnutrition is *very early, prolonged, and severe, it does not appear* *to result in permanent mental deficit.*[11] Even children who have been hospitalized for life-threatening malnutrition appear capable of virtually full recovery if they are provided with both an adequate diet and intellectual stimulation — a sort of highly structured Head Start with food. There is a deception, here, however.[12] In real life such children are not usually miraculously rehabilitated. And as I pointed out some years ago, it is irrelevant to argue about the permanency of the effects of deprivation if the deprivation itself is permanent.

But if the handicap imposed by even severe malnutrition can be remediated, why was there such wholehearted acceptance of the original notion that much less severe malnutrition led inexorably to irremediable intellectual deficit? Why did otherwise skeptical scientists "buy" the idea so readily, even before the hypothesis was really tested? At least partly, to be sure, because they needed to create a sense of urgency among hardheaded politicians about the ultimate cost of failing to feed the developing world's starving children. In this country, their too rapid acquiescence came very close to backfiring. For when the first reports of Hunger in America filtered up to the seats of power more than a decade ago, we were warned in tones of alarm that those of our children who were ill-fed in early childhood might suffer a permanent reduction in the numbers of their brain cells or in the critical interconnections between them — thus permanently handicapping them as learners.[13] An argument meant to provide a stimulus for food programs began to look like one more excuse for not educating children. If we did not remedy these children's hunger in time, it was argued, they might come to school permanently and irremediably retarded. That is not so. We cannot so easily discard these children. America at its worst was never Biafra at *its* worst.

And when at last that fact became evident, concern shifted from severe malnutrition to worry about the effects of chronic undernutrition and hunger.[14] And we began to argue, quite logically, that children who came to school without breakfast (and too often without an adequate supper the night before) would inevitably be poor learners because they were, at worst, debilitated by their nutritional deficiencies and, at the least, distracted by their hunger. But asserting something and proving it scientifically are two different things. Unless a child is severely malnourished — as I have pointed out earlier — it is difficult if not impossible to assess that child's nutritional status in a scientifically valid way. Most people who have seen — or tried to teach — hungry children, remain convinced that learning is at least daunted by hunger. Those who have tried to *prove* that it is, have found both hunger and its educational effects miserably difficult to pin down.

In 1970, discussing the question of whether schools ought to provide for children who were otherwise unprovided for, I wrote the following: "There is, of course, one last argument which can be advanced against the notion that the schools should provide for children's physical needs — that is that we can't *prove* it will help them learn . . . The hard scientific evidence to support the notion that children's present biological condition correlates with their learning is best described as fragile. There are a few studies . . . for what it is worth they have all tended to show that children who were better nourished did better. But the fact remains that there are . . .

no controlled studies which show whether the child who is very hungry is unable to work as well in school as one who is not hungry — or even whether he is just unwilling to."[15]

Since that time there have been a number of impressionistic reports from teachers or other personnel in schools which have initiated breakfast programs to the effect that the children are easier to teach, more attentive, less quarrelsome. They are also said to have better attendance records.[16] I suspect that at least some of these reports are true — even if the children's changed behavior reflects only the teachers' optimism or the children's pleasure that someone cares enough for them to fill their empty stomachs. For what must never be ignored is the fact that just as hunger is not always a biologically definable state, but a psychologically defined one, so the act of eating has overtones that go far beyond its biological function of providing energy and nutrients to the organism — a fact which inevitably confounds research results in the field of diet and behavior. Feelings and food consumption are tied together, inevitably, by our long period of infancy and dependence.

But whether the teacher impressions are true or not, teacher impressions are not accepted as scientific evidence. So within the past few years, a number of careful studies designed to provide evidence regarding the effect of school meals on mental functioning have been carried out. One showed no significant differences in attentiveness and test performance among children who did or did not have "breakfast" (150-200 calories of "something") or among another group which did or did not have a midmorning snack.[17] Another study found a very small decrement in performance on certain tasks among anemic children, and small improvement on certain measures of psychological functioning among children receiving meals at a Head Start center — though the data suggested that a vitamin pill would do as well as a meal.[18] A study reported last year compared attendance, reading and math scores, and performance on various psychological tests for 3rd to 6th graders at two schools, one serving a regular hot breakfast, the other serving none. There were no differences.[19] The latest review of the literature I have seen had about it a kind of frantic determination to remain optimistic and connections will be found between school feeding programs and learning — despite consistently negative results.[20]

Now let me make it clear that my comments to this point should not be read as a rejection of the idea that what children eat affects what they do and what they can — and will — learn. I am firmly convinced, as a recent report put it, "that what does or does not go into the mouths of human beings is of central importance as to how they work, learn and behave."[21] I am convinced diet matters — just as we were all convinced that mothers' diets mattered to the development of their infants, long before anyone was able to put together a study that would prove it scientifically. Animal studies on malnutrition and learning are extrapolated to humans at the extrapolator's peril, but it is probably pertinent that in all species tested, malnutrition tends to produce increased emotionality and reduced exploratory behavior — so that focused attention to and interaction with the surrounding environment — a prerequisite to learning — is reduced.[22]

I have assumed from the listed topics that Jeanne Chall will this afternoon be dealing with some of the more recent research on the ways in which single biochemicals — many of them nutrients — can affect neurochemistry and hence, presumably, behavior. We have known for generations that nutrition affects nervous system function — the insane asylums of the South were long filled with the victims of pellagra, a vitamin deficiency afflicting corn eaters which was considered a hopeless illness until Joseph Goldberger cured it with brewer's yeast. But just how and in what ways we behave as we eat remains a subject of controversy. We are at odds over megavitamin therapies and over the question of whether hypoglycemia (low blood sugar) is a medical rarity or a disease afflicting millions of ordinary citizens. And surely everyone associated with the schools is accutely aware of the Feingold controversy — the argument over whether all or any part of the problems of hyperactivity in children can be attributed to allergies caused by a certain class of substances commonly found in food additives.

We are really just beginning to explore the relationships between nutrients and behavior — indeed between biochemicals of all sorts and behavior. My point is just that — we *are* just beginning; so the evidence useful to educators regarding *which* children are affected, in *which* ways, by *what* kinds of nutritional insults and with what effects on their characteristics as learners — such evidence is not yet to be had.

Meanwhile, we seem to have concluded some time ago that it may be foolish for *us* to ask whether hunger has adverse educational consequences — since in this generally over-fed country we can so readily remedy the hunger. Even if we cannot prove that hunger interferes with learning, we collectively have not found it acceptable that some children should remain hungry. Without solid evidence that such meals will be important to their learning, we have as a nation concluded that children ought to be provided with lunch — and breakfast too if they need it — and that they ought to have it free if they can't pay for it.

Which leads me — with some grace I hope — from my assigned topic *The Educational Effects of Nutrition* to my self-assigned topic, *The Nutritional Effects of Education.* I am led here by a conclusion — which I will explore more fully in a few minutes — that whether or not school breakfasts and lunches have physiological effects which alter children's ability to learn, school feeding programs — as routinely carried out — clearly have significant educational effects, most of them negative.

But let me begin somewhere else. I suppose you too have seen the signs indicating that, ready or not, you are on the verge of having nutrition education mandated in your schools. There is at this moment in a Senate/House Conference Committee an amendment to the National Child Nutrition Act, passed overwhelmingly by the Senate, which includes a provision to supply to each state at least 50c for every child enrolled in school to be used in initiating nutrition [illegible]cation efforts.[23] I am told that the bill will probably be out of commi[illegible] in late August — with the Nutrition Education provision intact. But whether or not this particular amendment survives this particular Conference Committee, it is becoming obvious that later if not sooner, there will be mandatory nutrition education in the schools. The reason for this is simple. We are running out of resources to support a so-called health care system which is really a sickness-care system — which devotes a disproportionate share of its assets to applying "terminal life extension technologies"[24] to people who have never been taught how to stay healthy. It has become clear, moreover, that the diseases which are trying to kill us — at younger and younger ages — are degenerative, and that at least a portion of this degeneration relates to the dietary pattern we have adopted over the last quarter century.

And so, as frequently happens when society discovers a problem — the schools are going to be asked to fix us up. You are going to be asked to educate children "so that they will be able to make wise nutritional choices," or, to use the language of the bill "so that individuals receiving such information will understand the principles of nutrition and seek to maximize their well-being through food consumption practices." I am tempted to say "good luck" and sit down. But as someone who has tried very hard to understand the failure of nutrition education over the last 30 years, I feel obligated to share with you some of what I have learned.

There is a widespread assumption loose in the land that if schools are not teaching something, it is not really getting learned. When pressed, most people will acknowledge that this is really not the case, that — sure — their children are learning the alphabet and the numbers from Sesame Street, and the pop tunes from the radio, but the schools are still supposed to be teaching the "important" things. And as you well know, the schools are still blamed when children and society do not turn out right — though school persons are not credited when for some reason things *don't* go wrong. Even the overall topic of this meeting, *Beyond the Schools — What Else Educates?* is testimony to the power of the image that the school remains the major educator. Yet as we all know, that is simply not the case. Television (as we were reminded again yesterday) is a major educator — teaching a good deal more than numbers and letters, alas — having at children for more total hours than all their teachers put together. We have not even begun to ask what *that* message stream is teaching or whether the children brought up in thrall to that flickering picture are really different creatures than we, with different modes of perception.

The average child watches about 20,000 commercials annually, of which a very significant proportion (up to 90% on some children's programming) are for edible products — sweet cereals, cakes and cookies, sugary beverages, candy, chewing gum, fast foods.[25] These are some of the foods that some of the cleverest minds in America are selling to children, over and over and over, long before those children ever reach a formal classroom. Parents feel frustrated about their inability to control their children's diets[26] — even though they are not particularly good — as our health statistics indicate — at controlling their own diets. But you will be expected to be more successful, to help wean children away from what their television sets have been teaching them toward "nutrition knowledge" and ultimately toward "healthier diets."

I even have a pretty good idea of what those healthier diets will look like. You will probably be asked to help shift the next generations away from the heavy meat, heavy fat, heavy sugar, heavy salt diet of their parents' generations toward a diet containing more fruits, vegetables and whole grains, less salt, fat and simple carbohydrates, more chicken and fish, less red meat, fewer pastries and desserts, less fried salty snacks. A report from the Senate Select Committee on Nutrition and Human Needs recommending such changes has already been issued.[27] This report, *Dietary Goals for the United States*, has been the cause of near fisticuffs among nutritionists since its issuance in February.[28] *They* are arguing about some of the Committee's numerical recommendations (a 40% reduction in sugar intake, for example, or a 25% reduction in fat intake). But the *food* advice, the recommended changes in food selection which I have listed above is fairly well agreed upon as a rational and appropriate basis for nutrition education. These recommendations — or something very like them — will doubtless be built into a number of government programs — including the nutrition education program in the schools.

What chance of success do you have in this task that is about to be assigned to your domain? A great deal, I think, if you go into it with your eyes open. But if you — we — are to be successful, I think you will need to understand — as I have come to understand — the implications of that success. When I first came into the field of nutrition education, quite late in life, I knew I was coming into a profession which was infused with a sense of failure. If one looked at the "typical American diet" it was clear that the nutritionists were not winning. The traditional explanation for this was that people were either ignorant or in the misguided hands of Adele Davis and other "food faddists." To an unblinkered observer, however, it quickly became evident that the public was neither abysmally ignorant nor "faddist" but rather badly confused and misled by forces much more pervasive and powerful than the late Ms. Davis.

Why did people need nutrition education so badly? Humans had, after all, selected life-sustaining diets for countless generations even before nutrition science was dreamed of. Quite simply, the choices had gotten harder. Between 1928 and 1968, the typical large supermarket went from offering 800 items to offering 8000 items.[29] It may now contain 12,000 items, selected by the manager for fast turnover from more than 40,000 items in the food supply. The average supermarket has become, in the words of one observer, a minefield through which the housewife must wend her way without a map.[30] Since a very large proportion of the products on the shelves are overprocessed, overpriced, and — increasingly — overfortified with vitamins and minerals to make them appear "nutritious," the shopper's chances of going wrong — unless she has a college degree in nutrition science — are overwhelming.

Even as it became clear to me that a large part of our nutrition problem related to the number of questionable products on the market, it became equally obvious that the underlying cause was economic. If people ate the way nutritionists apparently wanted them to eat — the way the Dietary Goals statement suggests they *should* eat — a number of food companies would suffer serious economic losses, perhaps even go out of business. They have become dependent upon the public's consumption of novelty food products which are, taken as a group, more expensive and less nutritious than the foods nutritionists typically urge people to eat.[31] (Since I do not at the moment have time to elaborate on why this is so, I will simply point out that the profit margin is clearly higher, and more predictable, on a Pringle which is shelf-stable for a year and costs the consumer more than $2.00 a pound than it is on a plain old raw potato which costs a lot less and can rot.)

But how has this food industry dependence on overpriced novelty come about? Food has a unique property which has made it especially vulnerable to the American economic system. Unlike other products, food is difficult to consume beyond certain very narrow limits. While you can have three houses, four cars, twenty suits and 30 pairs of shoes (if you can afford them) you can only eat so much food, even if you are willing to tolerate obesity as the price of overconsumption — as many Americans appear to be. As the rate of population growth fell off in this country, the food industry would, in a rational world, have stopped growing much at all. But economic viability in the U.S. has been associated with GROWING — as fast as possible. And in order to grow, the food industry had to invent products for which we could be coaxed to pay more on the grounds that they were non-caloric (the Dorian Grey approach to gluttony), convenient, fun, or, ultimately, just *new* — like Pringles.

And, of course, the food companies won out over the nutritionists because they had something terrific to sell — not food, but hedonism. Moreover, they had the nutritionists seriously outgunned. The food industry is the largest industry in the U.S.; the nutrition profession is among the smallest of professions. We had pamphlets; they had television. To put it in instant perspective, I will simply point out that the estimated annual government expenditure for nutrition education — and this includes all those wonderful pamphlets about cooking rutabagas — is something less than the Coca Cola Company spends in a year of promoting the use of one product.[32]

Now inevitably this analysis of the problem throws nutrition educators into direct conflict with the food industry. For any company's ultimate goal *must be* to sell products. On the other hand, the nutrition educator's ultimate goal *must be* to promote good nutritional habits — to teach people how to get the best diet at the lowest possible cost, within the constraints of their respective lifestyles. These goals — that of the food manufacturer and that of the educator — are often incompatible, since much of what the educator ought probably to be teaching is, as I have said nonconsumption of the very food products from which the producer makes the greatest profit.

Now I have engaged in this apparent digression about the food industry in order to alert you to two things. One is that you will be up against a very powerful and economically-motivated competitor if you seriously set out to teach children the nutritional wisdom of consuming simple, healthful diets. The second is that in this conflict between economics and nutritional sanity, you have not been innocent observers. Five years ago, as the result of an amendment offered to the Child Nutrition Act by Representative Albert Quie, Congress took away from the Secretary of Agriculture the power to control the sale of competitive foods where federally funded school lunch programs were operating. By thus giving back "local control," Congress opened up vulnerable local administrators to the full impact of industry lobbying groups anxious to introduce their snack products into the lucrative school market. They have been remarkably successful. Foods of highly questionable or *no* nutritional value can be found for sale in corridors and lunchrooms of schools across the country. So appalling has this invasion become that as you no doubt know, concerned citizens in a number of areas have banded together to force the local school boards to ban "junk foods" from their schools. Often the major *open* opposition has come, not from the candy bar and soda manufacturers, but from school administrators who argue that these are the only foods children will buy — and anyway the money is needed for band uniforms.

Meanwhile, the nutrition lessons are not lost on the students: money is more important than wise food choices; schools approve of your eating whatever tastes good to you — even if your teeth rot; you should be free to make your own food choices (just as if you were indeed *free* after hundreds of thousands of commercials). In a country whose constitution guarantees life, liberty and the pursuit of happiness — in that order — we as educators are tacitly assuring our children that we agree with their decision to put the pursuit of happiness first — even if they do not yet really understand the implications of that choice for life.

What I am saying, of course, is that schools — like television sets, and societies — teach things all the time, even when they do not mean to. In an article entitled *The School As Surrogate Conscience*, Henry Steele Commager once wrote the following: "Educators have, of course, long been aware of the dichotomy between what is taught in the schools and what is held up for approval and emulation by most other institutions of society . . . To judge by results — the results of the past 40 years or so — this whole enterprise of relying on schools to reform society *by direct teaching* has been an unmitigated failure . . . The schools cannot reconstruct society, and society has little interest in reconstructing itself along the lines that schools might find gratifying. The schools cannot reform education, *for most of education goes on outside the school room.*[33] Outside the school room, I would suggest, but not always outside the *school*. And that brings me to school lunch.

As I suggested much earlier, there continues to be a lot of interest in investigating the educational effects — the effects on children as learners — of school lunch. I vote instead that we simply accept school lunch as an educationally relevant experience and ask what it is teaching. I must confess that for a long time school lunch bored me. I have come to suspect that the school feeding programs affect most educators the same way — either boring them or enraging them as a somewhat untidy and educationally irrelevant activity which the U.S. government forces them to engage in. But school food service doesn't bore me anymore. For I have come to the conclusion that nothing we can teach about nutrition in the classroom is going to have any effect at all if it is flatly contradicted by the experience of the lunch room.

Let me tell you a story. Some time ago I did a study which involved finding out about the food habits of the teenagers in a relatively affluent community near my home. In the course of the study I discovered that most of the young people did not report eating hot lunch. Instead a large proportion of them appeared to be making their lunch off juice drinks (sugar, water, 10% fruit juice if you're lucky) and bags of corn chips or cookies. In the course of checking out the validity of these reports, I went to the school cafeteria. The dining hall itself was not unpleasant, but the entrance to the lunch line was a narrow doorway at which there tended to be a pile-up of impatient kids. When you entered, you could see right in front of you a stainless steel tray half filled with a kind of greasy liquid on top of which were floating a few thin brown patties which were — I sincerely hoped — hamburgers. Down at the other end of the line sat the cash register, surrounded by twinkling cartons of fruit flavored sugar water and bright sanitary (at least!) packages of snacks. It turned out that the only large group of children who acquired the school lunch were the poorer children who could get it free. They picked it up and tried to sell it cheap to the other kids so they too could buy the "junk food" that was obviously the only sane thing to eat in that setting.

I am sure that this is an unusual example — that all of you have in your school systems nothing but warm-hearted friendly help, freshly-cooked food, and home-like lunch rooms where smiling teachers preside over tables of calm and happy children eagerly devouring their tasty lunches. But on the chance that at least one school lunchroom in your states is like the one I described, I want to close by talking about some of the lessons that are being learned — and, perhaps even more important, are not being learned in lunchrooms across America.

I operate on the assumption that we are nearing the end of an era of unthinking abundance and its accompanying waste. Given that assumption, I believe there are three important facts that children in America are not learning about food: they are not learning that it is precious; they are not learning that its quality relates to health; and they are not learning, really, that it is the product of a complex biological system.

Most Americans have difficulty thinking of food as scarce because, as Margaret Mead often points out, they are always having to refuse food to avoid gaining weight. To help them out the food industry has developed products — no calorie beverages, crackers made with methyl cellulose and bread diluted with wood pulp — which enable them to continue eating. Children learn from such products — and from our frantic efforts to avoid weight gain. They learn that food is not precious, that there is always more than enough, that it can even be thrown away. This attitude is helped along by television. A recent study found that in 94% of the food ads directed to children on weekend television, the primary appeal was that the food was "fun" to eat.[34] The emphasis on food as "fun" has tended to obscure for our children the fact that food is not naturally abundant and that only a small affluent portion of the world's people have enough food to risk wasting any.

This same emphasis on eating for fun has allowed all of us to forget that profoundly true cliche that we really are what we eat, and that our level of health and well-being relates very markedly to what we put in our mouths. I find passing a contemporary high school at dismissal time a very depressing experience. Anyone who tries to argue that we are not doing something wrong ought to take a look at our young people — presumably in the prime of life. We can't *prove* these children are malnourished — as the manufacturers of sugared products like to remind us — for as I explained earlier, in the absence of flagrant malnutrition we have a hard time defining "poor nutritional status." Nevertheless, I find these children a depressing reminder that we have produced, in the words of poet Wendell Barry, "the world's first broad-based hedonism."[35]

What is in the long run perhaps even more frightening, in a world growingly short not only of food but of the resources to produce it, is the fact that American children (and adults) do not understand the workings of their food support systems — or the importance of protecting them. We have so completely broken the food chain that leads from sun to soil to animal and man and back to the soil that children cannot be blamed if they believe that food is produced by food "manufacturers" rather than by farmers in league with the soil and the sun. Failing to understand that the whole system is sustained by the miracle the sun works with chlorophyll — converting light energy into chemicals one can sink one's teeth into — we have not taught our children their own dependence. We of the west have become what ecologist Raymond Dasman has called biosphere people,[36] drawing the resources on which we depend from all over the world. We do not live within the constraints of our own ecosystems. If we did, their breakdown would signal us to mend our ways. As biosphere people we draw on food and raw materials far outside our immediate life space to support our ultimately insupportable way of life. Thus we and our children remain unaware, except by report, of the true environmental impact of our food and other demands.

And the schools support us in our self-deception. School lunch rooms, more often than not, reinforce the very inappropriate lessons society is teaching our children about food. Let me end with one more personal story. Last year I learned that on the upper west side of Manhattan a number of schools were serving preplated lunches — and that these preplated lunches had been sent from California.[37] I thought at the time — and I still think — that the decision to serve such food involved a disastrous misunderstanding of the way the world was going and about the inevitable limits to energy and raw materials. Envision if you can the waste involved in mining, refining and shaping those aluminum trays, heating and then cooling the food, freezing those thousands of meals and keeping them frozen across 2000 miles, transporting them — by truck or train — at the cost of coal or deisel fuel, to some central storage point in the metropolitan area from which a truck, using more fossil fuel, picks them up and transports them to the schools where they are reheated, served and thrown away half-eaten because the Puerto Rican children in Washington Heights do not really like the food that the people in California have prepared for them. What a model of an insane food system! Importing preprocessed food to a destitute city which is short of jobs and surrounded by increasingly hard-pressed farmers. What inappropriate lessons those lunches teach!

Many of us are coming to believe in the necessity for a re-localization of our food supply — if only to cut down on the terrible energy waste involved in a process like bringing frozen lunches from California to Manhattan. The schools can be a model — using wherever possible locally produced and processed food, in many cases producing some of their own food as even New York City schools did in wartime. The new urban gardening projects have proved a godsend for nutrition educators — it is very hard for people not to love the vegetables they have grown. In the lunchrooms children can learn lessons their parents never had to know — about the ecological rationality of a diet lower in meat, about the ability of foods like beans and rice to complement each other so as to produce a meal lower in fat than meat but just as high in protein value.

Because Congress sees the school lunch room as the place where, if anywhere, real nutrition education must take place, the new legislation specifically requires that some of the funds be used to promote "nutrition information activities in local school districts using as a learning laboratory existing child nutrition programs, including, but not limited to the National School Lunch Program." I would urge you to view this mandate broadly. I would urge you to look upon this as a Congress-given opportunity to teach children many of the important lessons our society must master if we are to survive into the 21st century. In a world where food will become increasingly precious we owe it to our children to teach them the truth about it: that it *is* precious, that it is essential for survival, and that its production is dependent upon the health of a complex ecosystem which will be theirs to protect. The lunchroom must become part of the classroom; a place where a respect for food is modeled; where the elements of a rational health-promoting diet are served; and where the complex interrelationships between energy food and the environment are taken account of. Make no mistake, a great deal more than hunger is at stake in the lunchroom.

References

1. Harrell, R.F.; E.R. Woodyard; A.I. Gates. The influence of vitamin supplementation of the diets of pregnant and lactating women on the intelligence of their offspring. *Metabolism* 5: 555-562, September, 1956.
2. Stein, Z.,M. Susser; G. Saenger; F. Marolla. Nutrition and mental performance. *Science* 178: 708-713, November, 1972.
3. Birch, H.G.; J.D. Gussow. *Disadvantaged children. Health, Nutrition and School Failure.* New York: Harcourt, Brace & World, Grune Stratton, 1970. Drillien, C.M. The small-for-date infant: etiology and prognosis. *Ped. Clin. N. Amer* 17: 9-24, February, 1970.
   Neligan, G.A. The effects of intrauterine malnutrition upon later development in humans. *Psychiatr. Neurol Neurochir* 74: 453-461, December 1971.
   Lubchenco, L.G.; M. Delivoria-papadopoulos; L.J. Butterfield; J.H. French; D. Metcalf; I.E. Hix, Jr.; J. Denick; J. Dodds; M. Downs; E. Freeland. Long-term follow-up studies of handicaps to nursery routines. *J. Pediat* 80: 501-508, March, 1972.
4. Bergner, L.; M.W. Susser. Low birth weight and prenatal nutrition: An

interpretive review. *Pediatrics* 46: 946-966, December 1970.

Rush, D.; Z. Stein; M. Susser. The rationale for and design of a randomized controlled trial of nutritional supplementation in pregnancy. *Nutr. Reports, Inter.* 7: 547-553, May, 1973.

5. Habicht, J.P.; C. Yarbrough; A. Lechtig; R. Klein. Relationships of birthweight, maternal nutrition and infant mortality. *Nutr. Reports Inter.* 7: 533-546, May, 1973.

Blackwell, R.Q.; B.F. Chow; K.S.K. Chinn; B.N. Blackwell; S.C. Hsu. Prospective maternal nutrition study in Taiwan: Rationale, study design, feasibility and preliminary findings. *Nutr. Reports, International*, 7: 517-532, May, 1973.

6. Select Committee on Nutrition and Human Needs, United States Senate. Medical evaluation of the special supplemental food program for women, infants and children. Washington: U.S. Government Printing Office, 1976.

7. Porter, W.T. The physical basis of precocity and dullness. *Trans. Acad. Sci. St. Louis* 6: 161, 1895.

Leitch, I. Growth, heredity and nutrition. *Eugen. Rev.* 51: 155-156, October, 1959.

8. Boas, F. Changes in the bodily form of the descendants of immigrants. Immigration Commission Document No. 208. Washington, D.C., U.S. Government Printing Office, 1910.

9. Cravioto, J.; E.R. DeLicardie; H.G. Birch. Nutrition, growth and neuro-integrative development an experimental and ecologic study. Supplement to *Pediatrics* 38: 2, Part II 319-372, August, 1966.

10. Brown, R.E.; F. Halpern. The variable pattern of mental development of rural black children. *Clin. Ped.* 10: 404-409, July, 1971.

Sanstead, H.H.; J.P. Carter; F.R. House; F. McConnell; K.B. Horton; R. VanderZwaag. Nutritional deficiencies in disadvantaged preschool children. Their relationship to mental development. *Amer. J. Dis. Child* 121: 455-463, June, 1971.

11. Frisch, R. Present status of the supposition that malnutrition causes permanent mental retardation. *Amer. J. Clin Nutr.* 23:189-195, February, 1970.

Ricciuti, H.N. Malnutrition and psychological development. Proceedings of the Association for Research in Nervous and Mental Diseases, 1973.

12. Yaktin, U.S.; D.S. McLaren. The behavorial development of infants recovering from severe malnutrition. *J. Ment. Defic. Res.* 14: 25-32, 1970.

McKay, H.E.; A. McKay; L. Sinisterra. Behavioral intervention studies with malnourished children: A review of experiences. In Kallen, David J. (ed.) ***Nutrition, development and social behavior***, DHEW Publication No. (NIH) 73-242 Washington: U.S. Government Printing Office. 1976.

Levitsky, D.A. Malnutrition and the undernourished curiosity. *Human Ecology Forum* 6: 12-14, Spring, 1976.

13. Hurley, R.L. Poverty and mental retardation: a casual relationship. New York: Random House, 1969.

14. Read, Merrill, S. Malnutrition, hunger and behavior. I. Malnutrition and learning. *Jour. Amer. Diet. Assn.* 63: 379-385, October, 1973. And II. Hunger, school feeding programs, and behavior. *Jour. Amer. Diet. Assn.* 63. 386-391, October, 1973.

    Kallen, D.J. Nutrition and the community. In Kallen (ed.) *Nutrition, Development, and Social Behavior.* DHEW Publication No. (NIH) 73-242. Washington: U.S. Government Printing Office, 1976.
15. Gussow, Joan Dye. Bodies, brains and poverty: Poor children and the schools. *IRCD Bulletin* VI: 3+, September 1970.
16. If we had ham, we could have ham and eggs . . if we had eggs; a study of the national school breakfast program. The Food Research and Action Center, 1972.
17. Dwyer, Johanna. An experimental breakfast program: acceptance and some aspects of classroom performance. Presented at a VIB seminar on the Ecology of Dysnutrition. New York, N.Y., November 1, 1972.
18. Sulzewr, J.L.; W.J. Hansche; F. Koenig. Nutrition and behavior in head start children: results from the Tulane study. In Kallen, (ed.) *Nutrition, Development and Social Behavior.* DHEW Publication No. (NIH) 73-242. Washington: U.S. Government Printing Office, 1976.
19. Lieberman, Harry M.; I.F. Hunt; A.H. Coulson; V.A. Clark; M.E. Swendseid; L. Ho. Evaluation of a ghetto school breakfast program. *Jour. Amer. Diet. Assn.* 68:132-138, February, 1976.
20. Unpublished grant proposal, 1976.
21. Health and nutrition as possible factors in juvenile anti-social behavior. The Ford Foundation, July 20, 1976. Unpublished.
22. Dobbing, John. Undernutrition and the developing brain, the relevance of animal models to the human problem. *Bibl. Nutr. Diet.* 17:36-45, 1972.

    Levitsky, D.A., 1976, *op. cit.*
23. McGovern, George. National School Lunch Act and Child Nutrition Act of 1966 Amendments of 1977. *Congressional Record* 123: 71. April 28, 1977.
24. Mendelsohn, R.; J. McKnight; I. Illich. National health insurance and the people's health. *Clin. Ped.* 12: 324-325, June, 1973.
25. Hill, Charles, et al. Petition of the Center for Science in the Public Interest for a rule to regulate advertising of sugared food products on children's television. Before the Federal Trade Commission, April 26, 1977.
26. American Family Report, Raising children in a changing society — a study for General Mills Inc. by Yankelovich, Skelly, and White. Reported in *Advertising Age*, May 2, 1977.
27. Dietary Goals for the United States. Prepared by the Select Committee on Nutrition and Human Needs, United States Senate. Washington: U.S. Government Printing Office, 1977.
28. Forum's Forum on Dietary goals for the United States. J.C. Penney *Forum*, Fall/Winter, 1977. Also see SNE debates dietary goals, *CNI Weekly Report* VII: 29: 6-7, July 21, 1977.
29. Parrish, J.B. Implications of changing food habits for nutrition educators. *J. Nutr. Educ.* 2: 140-146, Spring, 1971.

30. Gross, Larry. Can we influence behavior to promote good nutrition? *Bull. NY Acad. Med.* 47: 613-623, June, 1971.
31. Hadsell, Robert M. Food processing: search for growth. *Chemical and Engineering News*, August 23, 1971.
32. The role of the Federal government in nutrition education. A study prepared by the Congressional Research Service Library of Congress for the Subcommittee on Domestic Marketing, Consumer Relations, and Nutrition of the Committee on Agriculture. Washington: U.S. Government Printing Office, 1977.
33. Commager, Henry Steele. The school as surrogate conscience. *Saturday Review*, January 11, 1975.
34. Atkin, Charles; Gary Heald. The content of children's toy and food commercials. *Journal of Communication* 27:107-114, Winter, 1977.
35. Berry, Wendell, Land Reform starts on the land and in the heart. *Environment Action Bulletin*, October 19, 1974.
36. Dasmann, Raymond. Toward a dynamic balance of man and nature. *Ecologist* 6:1: 2-5, January 1976. Also see Future primitive, *Ecologist* 6:5: 164-167, June, 1976 (reprinted in *The Co-Evolution Quarterly*, Fall, 1976.
37. Gussow, J.D. On training students for an unknown future. *CNI Weekly Report* VI:10: 4-6, March 4, 1976.

CHAPTER VI

Implications of the Neurosciences for Education

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I hasten to say that I am not a neuroscientist. My immediate credentials for this presentation are co-editorship of the National Society for the Study of Education's (NSSE) Yearbook for 1978, *Education and the Brain*. The co-editor, Alan Mirsky, is a neuropsychologist. But I remain an educational psychologist with major interests in the psychology and teaching of reading, and in the diagnosis and treatment of reading and related learning disabilities.

It is in relation to my interests in reading that I became aware in the late 1950's of the relevance of neurology for understanding reading disability. More people were looking then toward neurology for an explanation of reading and language disability, and away from the prevailing view that reading and language disabilities were psychodynamically based. Thus, in a relatively short period of time, the causes for children's reading and language disabilities were sought in the brain, and not primarily in motivation, parent-child relations, emotional problems and other psychological factors.

By the early 1960's, the diagnostic procedures had also changed, with the neurologist tending to direct such evaluations in place of the psychologist or the psychiatrist. Treatment shifted as well, from remedial reading and perhaps psychotherapy or counseling, to training of the so-called underlying psychoneurological processes of visual perception, auditory perception, and visual-motor coordination.

At about the same time, the concept of minimal brain damage (MBD) and learning disabilities as one form of MBD, began to be recognized. One category under MBD was hyperactivity, a condition characterized by difficulty in sustaining attention, and therefore difficulty with ability to do what the school required. Medication was often prescribed and taken during school hours. This opened up a host of concerns to the educator as to whether the drugs were in fact beneficial, whether they might in some way be contributing to a later drug addiction and whether the schools should take responsibility in dispensing them.

By the early 1970's, it appeared that educators were already very much involved with the neurosciences. And since so much was being discovered, and so much was controversial, they needed to know more about current research and theories about the brain. During the 1970's much was published in popular magazines that could be helpful but could also mislead.

The profusion of these articles and books, particularly during the past few years, attests also to the growing interest in the subject as well as to the increase in knowledge.

Knowledge of the neurosciences is also complicated by the fact that they are composed of many different disciplines, among them neurology, psychiatry, neuropsychology, cultural anthropology, chemistry, biology, nutrition, educational psychology, and the fields of reading, language and learning disability.

Because of the great variation in background among the neuroscientists, one can expect some difficulty in communication among them, and between the brain scientists and the non-specialist.

In 1974 I proposed to my fellow NSSE (National Society for the Study of Education) Board members that the time was perhaps right to do one of their annual scholarly reviews of the neurosciences and their implications for education. They agreed. I had assistance from the NSSE Board, from neuroscientists such as the late Hans Lucas Teuber of MIT, Jerome Kagan of Harvard, Richard Held of MIT, George Miller of Rockefeller University, and Horace Magoun and Louise Marshall of the National Committee on the Neurosciences, and many others. All gave freely of their time and counsel, and with their help, and that of Alan Mirsky, a co-editor, a Yearbook Committee was appointed, and a group of distinguished authors was chosen.

I will report here on some of the concepts and research findings of particular relevance to children and their schooling from the 1978 NSSE Yearbook, *Education and the Brain*, and from other relevant sources.

Hemispheric Specialization

I start with the "hottest" concept from the neurosciences — the one that is probably the most popular currently in the general press — that the human brain is divided into two halves, each having different functions. While all of this seems very new, it is important to realize that it has been known a very long time, some knowledge going back to classical times.

Medical people have long known that each half of the brain controlled the opposite side. But, only during the latter half of the 19th century did physicians first conjecture that the higher mental functions might be organized in an asymmetrical way in the left and right hemispheres.

Careful study of victims of language loss (aphasia) revealed injury to the left cerebral cortex. Rarely was equivalent loss of language found when the right cerebral hemisphere was damaged. By 1950, according to Howard Gardner (1977), a considerable number of higher reasoning powers were attributed to the left hemisphere. After 1950, some evidence began to accumulate regarding the special powers of the right hemisphere. But there is much disagreement with regard to these recent findings.

In spite of differences of opinion, there seems to be a left hemisphere advantage for dealing with language. The left hemisphere also seems to assume a more dominant role than the right in classifying objects according to standard categories of experience — e.g., sorting out from a set of objects all the red large cones or all the pieces of furniture. (Gardner, 1977)

There do not seem to be as strong cognitive right hemisphere effects as the left hemisphere's dominance for language. Most people agree that the right hemisphere seems relatively more important in spatial tasks, such as finding one's way around an unfamiliar room or visualizing in one's head the image of a two- or three-dimensional form. It also seems crucial in fine sensory discrimination such as recognition of faces or detection of unfamiliar tactile patterns. (Gardner, 1977)

Recent research and analyses by Merlin Wittrock (1978) points to the importance of an individual's hemispheric preference on how information is processed as well as on the kind of information that is processed. The left hemisphere processes sequentially, and analytically; the right processes simultaneously and globally.

Several experiments point to the possibility of improving upon relatively weak left-hemisphere processing by making use of the processing of the right hemisphere. Thus, to improve reading comprehension and recall, both left-brain processes, imagery, considered a right-hemisphere process, is used. (Wittrock, 1978)

Another educational implication drawn from hemispheric specialization is that schools make more use of "right brain" activities such as art and music and construction so that those children weak in the left brain processing of language, reading and writing and various forms of analysis, have another means of learning and excelling. This view is represented by Samples (1977). Education and culture have been biased, he claims, against the cyclical, metaphoric, right-hemisphere thought. The time has come, he says, for educators to take the lead in uniting the linear-logical (the function of the left hemisphere) and the cyclical-metaphoric (the types of thinking attributed to the right brain). Indeed he seems to imply that the schools and the general culture have engaged in a conspiracy to keep down pupils who are not proficient in the language skills required and rewarded most by schools of today.

"The cultural ecology, with its emphasis on structure, logical and linear conformity, overtly and tacitly prejudices against the analogic, intuitive, wholistic functions of the right mind." He continues: "The point here is that the capacity for expressing metaphoric knowing persists at all stages of cognitive maturity, yet, in terms of prevailing teaching strategy and curriculum materials, appropriateness of its use is diminished through the school experience." (p. 691) His plea for a curriculum more appropriate for right-brained pupils is very strong, stating that such pupils have been given "second-class citizenship in the community of thought."

His argument for a "right-brained" curriculum becomes still stronger: "The metaphorical mind faces the pecking order created by rationality. Schools and tax agencies seem to have been created for each other. Counting and affirming, conforming and analyzing dominate the educational and social scene." (p. 692)

It would seem that in his enthusiasm, Samples proposes that we change schools and the world into places that will be happier for those strong in right-brained activities. It is interesting that in an interview in September, 1977 on the report of the Advisory Panel on the Decline of Scholastic Aptitude Test Scores, Matina Horner, President of Radcliffe College and a member of the Panel, noted that frequent watching of TV instead of reading may have a negative effect on scholastic achievement by exercising the right, visual hemisphere. The left hemisphere which is used in language and reading would not therefore receive sufficient exercise. Thus, it would seem that Matina Horner is concerned with just the opposite — that we may already be giving too much exercise to the right brain and too little to the left.

Thus far we have mentioned three different educational interpretations and implications of the facts of hemispheric specialization. One position says that since modern school tasks and life require and reward the left-brained, we should change schools and the world to give more rewards to those who are right-brained, metaphoric and analogic. (See Samples) Another view accepts the preeminence of left-brained activities for academic achievement and is concerned with providing sufficient practice to exercise and strengthen that hemisphere. (See Horner) The third tries to make use of the right hemisphere for strengthening activities that require the left. That is, imagery and visual media are used for better understanding of printed text. (See Wittrock)

While one can be sympathetic with attempts to promote "democratic brain utilization" one cannot help asking whether modern technological-scientific societies can exist without strong proficiency in language, analysis, and sequencing — left-brain activities. One can be polemic against a predominant left-brain education, but will graduates of schools exercising the right brain find employment?

Wittrock notes some recent research that found a greater proportion of right-brained children in the lower SES. Does this mean that their schools should focus on right-brain activities, as Samples seems to propose? Yet from the recent demands for "basics," it would appear that the schools may be in for difficulties if they change the curricula to favor the visual, intuitive right brains. The parents who want "basic skills" seem to be asking for better reading, writing and arithmetic — that is, for stronger left brains. They do not seem to ask for the "right brain" activities of Samples.

While it may be quite true that some of the world's geniuses may be more right than left-brained — Einstein, for example — most also learned the left-brained activities, reading and writing, although often with the help of tutors and special schools. One wonders whether they could have survived academically and fulfilled their scientific potential if they had not somehow mastered literacy skills. Would they have done better with a mainly right-brained curriculum?

Maturation

Another of the recent findings from the neurosciences is that the brain takes a longer time to mature than was once believed. Thus it has been found recently that the newborn can make certain discriminations at birth while certain parts of the brain continue to grow through the twenties, and even through the thirties (Denckla, 1978).

It would appear, then, that the lowering of school entrance age to the nursery-school years and even to infancy in day-care programs has some confirmation. The growing trend toward extending the age of higher education to the mature adult years, and even to the retirement years, is also confirmed by these findings on the growth of the brain through the adult years. In a way, the brain scientists seem to be saying — never give up on anyone. People can be taught from infancy to middle or old age. If a student has not learned to read and write in high school, he can still learn.

Another finding relevant to education is that the rate at which the brain matures varies for different individuals and for different functions. Indeed most theories of learning disability now seem to favor a maturational lag explanation rather than one based on disease or disorder. As they view it, 6 year olds with difficulty in reading may be seen as "perfectly good" 4 year olds. Their major difficulty with reading arises because they enter school in Grade 1 when they have the prerequisite skills characteristic of 4 year olds.

Sex Differences

The difference in cognition and behavior between girls and boys may also be viewed as evidence of differential maturation. Girls are the faster maturers. They are also less common among learning disabled children (four boys to one girl), less frequent among juvenile delinquents (four to one) and referred less to child guidance clinics (Wolff, 1977; Denckla, 1978).

The slower brain development of boys (left hemisphere) gives girls an early advantage in language and in reading. The slower development of boys, and the discrepancy in terms of school and societal requirements, puts an added burden on them and they are more vulnerable in many ways.

The educational solution proposed by some researchers is differential entrance into school by state of maturation and readiness. Further, some even recommend delaying formal schooling, and especially reading, for all children till age 7, or better, 8. (Wolff, 1977)

It is important to note other recommendations for best age of school entrance of slow maturing children by others who have also been concerned with neurological factors. De Hirsch, Jansky and Langford (1966) and later Jansky and de Hirsch (1972) recommend early intervention, i.e., early screening for late maturers, then further diagnosis, and placement in transition classes, where the slow-developing functions are exercised in a variety of ways.

Thus it would seem that we have a return of the old reading readiness controversy of the 1930's, whether a later start or an earlier one (with special training to strengthen the weaknesses) is the best way to educate these children (Chall, 1967). This controversy preceded the present knowledge from the neurosciences. But it would seem that today, as in the 1930's the applications of knowledge about differences in maturation for early schooling will not easily result in guidelines for the best practice. Indeed, it would seem that the suggestions for a late school start for low-maturing children may be dysfunctional for low SES children who need the stimulating environment of school (Stallings, 1976). There is also recent evidence for the general advantages of an early start in reading (Durkin, 1966 and 1975; Smethurst, 1975). Thus a general across-the-boards recommendation for a delay in school may bring negative effects for many children.

One other aspect of maturation needs consideration — the gaps or discrepancies in skills and abilities of pupils in relation to continued school demands. It is well known that some children have a lag of two or more years on standardized achievement tests, and the gap may grow wider as they mature.

The educational significance of the discrepancy between what they can do and what those in their grade are expected to do grows as they proceed through school. It is not as significant in the primary grades as it is in 4th grade, when the gap becomes very great in terms of qualitative differences. Although in grades 1 through 3, reading is still being taught as a separate "subject," in grade 4 it is assumed that pupils can use reading for learning other subjects. The amount of independence in the use of reading becomes greater in the upper grades and in secondary school.

Growth Spurts in Brain Development

Herman Epstein (1978), a biologist, has proposed a theory of *stages* of brain development which may well manifest themselves in correlated, if not casually related, stages of mental development. He has found that human brain growth occurs primarily during the intervals 3-10 months, 2-4, 6-8, 10-12 or 13, and 14-16 or 17 years. "These stages correlate well in timing with stages found in mental growth. Further, those experimentally established intervals correlate in time with the classical stages of intellectual development as described by Piaget ... " (p.3)

The implications for learning and particularly for school learning are many. One hypothesis proposed by Epstein is "that intensive and *novel* intellectual inputs to children may be most effective during the brain growth stages." (p. 3) Novel challenges to the child's mind "presented at the wrong time might cause an active and potentially permanent turn-off of the ability to absorb some of those challenges at a later, more appropriate, age" (p. 3).

Behavior Disabilities

Most of the research and theories presented so far have been concerned primarily with acquiring cognitive skills. But the brain is also involved in other kinds of behaviors — in ability or lack of ability to control one's actions, in the ability or inability to benefit from past experiences, in ability to make the fine discriminations in facial expressions.

Such behaviors used to be interpreted as having roots primarily in attitudes, and in parent-child relations. Now much of it is recognized as being neurologically based, and similar to academic learning disabilities, benefiting from direct teaching and practice. Generally such teaching removes the behavior problems from the unknown, the mysterious. The child who has a behavior problem needs to have it made concrete, so that he can learn to cope with it. He/she needs help in developing strategies for coping, and like other people, needs to feel worthy of respect, even if he has a social problem (Lieben, 1977; Denckla, 1978).

Implications for Education

The implications of the brain sciences for education are immense. They range from general understandings about the broad effects of environmental conditions and learning on development to effective procedures for diagnosing and treating various handicapping conditions that are neurologically based, such as the minimal brain disorders and learning and behavior disabilities.

The most powerful of these generalizations for education is one that educators should find easy to accept, for it gives support to the meaning of their work. The brain, although it is implicated in all learning and behavior, is in turn modified structurally by the environment and learning. In rats, for example, it has been demonstrated that there is extra brain growth when the environment is stimulating. Thus, no matter what the strengths or weaknesses of the brain of a young or older student, the most effective treatment is environmental and educational. While for some forms of neurologically based difficulties drugs may be effectively prescribed, these are effective only if given in a program of learning, stimulations and environmental modifications at home and school that are constantly watched and modified as needed (Denckla, 1978).

The major treatment for children with minimal brain dysfunctions, according to neurologist Martha Denckla, is proper schooling that helps them to do what comes with relative ease to those not handicapped, but with great difficulty to them. Their academic and behavior problems vary, hence the need for individual diagnosis and treatment. With some it may be a specific reading problem, with others spelling or writing, and with still others simple or more advanced arithmetic. The first task in helping these children is to provide them with the consistent help they need in the academic areas of their special weakness. At the same time, they need to be helped to keep up with the level of work of their peers in the other academic and non-academic areas in which they have the potential to do average and above average work.

Fortunately, there is a vast body of knowledge and technology to test and treat such children, particularly in reading and related learning disabilities. But we need more specially trained teachers to work with such children. These children need a great deal of individual encouragement, excellent teaching and reinforcement.

Better means of bridging the gap between general cognitive ability and general school learning need to be devised. This is particularly so for the children who lag behind in reading. For them more systematic means for learning the content, concepts, technical and general vocabulary of the various subject areas are needed. They cannot yet read these themselves but they can learn the concepts and information if they are presented by other means. Tapes and books, and even records and books developed for the blind, have been used effectively. Audio-visual aids have also been used. All of these are worthwhile. But what seems to be missing is a general curriculum to assure that certain basic learnings are not overlooked for children with learning disabilities while great emphasis is placed on mastering reading, writing, and spelling.

Neuropsychogists and neurologists make similar recommendations for neurologically-based problems such as hyperactivity (currently classified by many as attentional difficulties). While drugs can be an effective part of the program, the major focus is on learning and control, which means proper teaching and expectations on the part of the school and the home. Similar treatment is prescribed for those with behavioral disorders. They too are taught cognitively and sympathetically those deficient skills that get them into great difficulty — inability to recognize facial expressions and moods as well as difficulty in controlling their own impulses and behavior. It should be noted that this particular view of behavior problems recognizes that some, at least, do not result from faulty parent-child interaction, or from defects in attitude and motivation.

The explanation for these behavior and other learning disabilities is that the brain is physically and functionally implicated. It is, of course, difficult to completely separate out the psychological effects from the neurological. But generally, it is important in dealing with these children to realize that they cannot help their poor spelling, reading, writing, arithmetic, or behavior. It is equally important to realize that they *need help* to learn the skills and abilities with which they have such great difficulty. Too much sympathy is equally, if not more, debilitating for them than none at all.

Contributions based on neurological knowledge have also been made to predicting and preventing reading failure in young children (deHirsch, Jansky and Langford, 1966; and Jansky and de Hirsch, 1972). Prediction of reading readiness has a long history. The first such measures were, in fact, developed by educators, based on various measures of linguistic and cognitive maturity (Morphett and Washburne, 1931). It is interesting to note that the more recent early predictive measures have a considerable resemblance to earlier ones — both measuring various aspects of language and thought. Thus the facts are essentially the same. The major difference is in the explanation. The earlier students of the readiness concept tended to explain the differences more in terms of intelligence and of environmental stimulation of language development (Gates, 1937). The current explanation by the neurosciences stresses the differential development of the brain, particularly the left hemisphere, by sex and by individual differences (with some, particularly boys, showing significant neurological lags). Thus the slower language development and reading readiness of boys is attributed to the slower development of the left hemisphere among boys of preschool age.

What are schools to do about this? It appears that the proposed solutions are similar to those of the 1920's and 1930's. Some neuroscientists say that formal reading instruction for children whose brain development lags should be delayed. This would include more boys than girls, but generally a substantial proportion of children in grade one. Much could be done with them, they recommend, of a non-literacy nature. A Piaget-type thinking curriculum has been recommended, for example (Wolff, 1977). A more drastic recommendation of the same type is to have all children start school later — at age 7 or even 8 — to reduce the numbers whose left hemispheres are immature at age 6.

Another group of neuroscientists claim that the slow maturers and developers can best be helped by the school if they are screened early for immaturities as well as strengths, and intervention programs are begun in kindergarten or even earlier. Both of these solutions have a long history. The recommendation to delay reading instruction till the child is "ready" is the older, having been the predominant view from the 1930's till the middle 1960's. Some private schools even delayed reading instruction for all — immature as well as mature — till age 8. The prevalent procedure for the past decade has been early screening and intervention for the "immatures," and early reading instruction for the "matures."

The research evidence to date seems to indicate that overall, early screening and teaching probably leads to better results (Durkin 1966, 1974; Jansky and de Hirsch 1972; Smethurst, 1975). But it may be that some immature children feel unduly pressured by this policy. It would seem that an important implication here for the school is to study this issue in greater detail. There probably are some schools that follow one or another of these policies. These should be observed and studied by a team of specialists including one from the neurosciences to gain further insights into the best possible solutions for the differential brain development of children generally, and of boys and girls in particular.

The current interest in the two hemispheres of the brain has important implications for education. If the two brains have different functions, with the left specializing in language, and analytic and sequential processing, while the right specializes more in spatial, parallel, and analogic learning, what does this mean for education? What does it mean for what the schools teach? What does it mean for students who have specific strengths or preferences in one or the other hemisphere?

Some educators are concerned that TV and other visual media may have possibly weakened the left hemisphere which should be "exercised" more. Some research indicates that it may be possible to teach students to use the right-brain in the service of the left — such as using imagery for improving reading comprehension.

Others are recommending that schools provide more art, music, construction and other non-academic activities that are primarily right-brained in order to provide something for the right-brained children to excel in.

Another group of champions for the "disadvantaged" right-brained individual call for more drastic changes in the present school curriculum. They want it to be less biased toward the "linear" "computing" left-brained students who end up as the high achievers, and more concerned with the visual, analogic right-brained students who end up as the low achievers. The claim is made that the right-brain is another and a creative route to knowledge and is indeed the one taken by some of the most creative scientists of our time.

What does this mean for schools? My considered judgment is caution. The possibilities of the first and second recommendations regarding the implication of the two hemispheres seem worthy to pursue, at least on a trial basis, but the third is quite drastic and can, if not implemented in small research projects, lead to unexpected and unwanted results.

A Concluding Note

In the interests of clarity, I may not have included a sufficient number of qualifications and cautions. The application of the neurosciences to education is still relatively new and must therefore be approached with caution as well as with the excitement that comes from viewing old problems in a new light.

We must be careful not to turn the useful slogan, "Remember the brain," (Denckla, 1918) into "Remember *only* the brain." This occurred about 30 years ago in the application of psychiatry and clinical psychology to reading and learning disabilities. It could also happen to the application of the neurosciences. Indeed, it may even be happening now with the declining concern for motivation and emotional problems along with the increase in concern for neurological factors in the diagnosis and treatment of reading and learning disabilities.

The greatest danger of all, I think, is that our hard-earned knowledge about teaching and curriculum from educational research and practice may be abandoned in our desire to study the effects of being either right- or left-brained. Instead, it is hoped that the findings and insights from the neurosciences can add to and reconstruct what we already know about teaching and learning and other educational problems.

Bibliography

Chall, Jeanne. *Learning to Read: The Great Debate.* New York: McGraw-Hill, 1967.

deHirsch, Katrina and Jansky, Jeannette. *Predicting Reading Failure.* New York: Harper and Row, 1966.

Denckla, Martha. "Minimal Brain Dysfunction," in Chall, Jeanne, S. and Mirsky, Allan F. (Editors). *Education and the Brain.* 77th NSSE Yearbook. Chicago, Ill; 1978 (in press).

Durkin, Dolores. *Children Who Read Early.* New York: Teachers College Press, 1966.

Durkin, Dolores. "A six year study of children who learned to read in school at the age of four," *Reading Research Quarterly*, Vol. X, No. 1, 1974-75, pp. 9-61.

Epstein, Herman. "Some Implications of Growth Spurts in Brain Development for Educational Policy and Practice," in Chall, Jeanne S. and Mirsky, Allan F. (Editors). *Education and the Brain.* 77th NSSE Yearbook, 1978, (in press).

Gardner, Howard. "What we know (and don't know) about the Two Halves of the Brain." Unpublished Manuscript. Harvard University, 1977.

Gates, Arthur I., "The Necessary Mental Age for Beginning Reading," *Elementary School Journal* (1937), 37: 497-508.

Jansky, Jeannette and de Hirsch, Katrina. *Preventing Reading Failure.* New York: Harper and Row, 1972.

Lieben, Beatrice. "Behavior Disabilities." Lecture in ST-150, Reading, Language and Related Learning Disabilities. July, 1977.

Morphett, Mabel V. and Washburne, Carleton. "When Should Children Begin to Read?" *Elementary School Journal*, (1931), 31: 496-503.

Samples, Bob. "Mind Cycles and Learning," *Kappan*, May, 1977.

Smethurst, Wood. *Teaching Young Children to Read at Home*. New York: McGraw-Hill Book Company, 1975.

Stallings, Jane. "Implementation and Child Effects of Teaching Practices in Follow Through Classrooms." *Monographs of the Society for Research in Child Development*, Vol. 40, Nos. 7-F, 1976.

Wittrock, Merlin. "Relationship between Cognitive Processes," in Chall, Jeanne S. and Mirsky, Allan F. (Editors). *Education and the Brain*. 77th NSSE Yearbook, 1978, (in press).

Wolff, Peter. "Neurological Theories of Learning Disability." Lecture in St-150, Reading, Language and Related Learning Disabilities. July, 1977.

CHAPTER VII

The New Religious Phenomena and Education

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Wherever one turns, clashes between public educators and leaders of the new religious phenomena are erupting. In some states Transcendental Meditationists educate or desire to, while educators and religious groups puzzle over whether they are representatives of a religion or not. In Kanawha County, West Virginia, but spreading to Dallas, California, and countless communities, new-fangled fundamentalists fight for equal time against the teaching of evolution, or no evolution at all. Longtime representatives of abrasive or unsettling religious modes, Jehovah's Witnesses or the Amish, fight against flag salutes or fight for their separate even if substandard schools.

The lists go on and on. Much of the opposition to sex education in schools has come and will come from explicitly religious groups. As Hare Krishna people or the Unification Church establish themselves as non-profit educational and religious groups and take themselves off the tax roles, citizens in Hardenburgh, New York, enjoy mass ordination into mail-order and diploma-mill ministries to get themselves off the same roles — until public education suffers. The believers in the Second Coming in numerous groupings ask for their own holidays, as do religiously inspired ethnic or racial groups. Battles over deprogramming the young reach into collegiate and even high school education.

Some of these stirrings are merely the current versions of church-state struggles that are as old as the Republic and are likely to remain with us. Others go considerably beyond issues anticipated back in the 1950s when "dialogue in a pluralistic society" led Protestants, Catholics, Jews, and secularists to understand each other better. They are a different form of controversy than those anticipated in the School Prayer decisions of 1962 and 1963. The previous controversies were over refinements in the rules of the game, whereas some of the current antagonists want a whole new game. In terms of your topic, they are forces that educate beyond the school — and sometimes against it, inspite of it, or certainly withholding consent from the way it is now constituted. Because the school is represented in every American locale, often by publics that do not comprehend these forces, the schools are among the most vulnerable of all agencies in society. People who cannot fight back directly at NBC or *Time* can frighten or dominate school boards, P.T.A.'s or faculties.

In the lay of the land today we might picture three clusters or zones of action, two familiar and the third classified among "the new religious phenomena." The first of these I call "Publick Religion," following a coinage by Benjamin Franklin in 1749. Franklin helped charter an academy in Philadelphia, one that he wanted to be free of sectarianism but which he lost to the Episcopalians. In his design it must be friendly to religion for the sake of morality and the commonweal. He was congenial toward the religious groups of the day insofar as they supported the common good and wherever they overlapped or intersected in their teachings. Since they were almost all Protestant Christian they did share much consensus, though a Philadelphia Quaker could be as far from an Episcopalian as a Black Muslim today might be from an Orthodox Jew, so far as style was concerned. Meanwhile, Franklin regarded what each sect taught independently as interesting but irrelevant, because it made no contribution to the common good.

The religion of Franklin was more than a mishmash of church faiths; he also shared the outlook of the Enlightenment: a belief in a divine ordering of the universe, in morality in rewards and punishments and a probable afterlife. These he thought to be universal while church religion taught the partial or the particular. In various degrees the other founding fathers shared his view, and Jefferson, Washington, Madison and their colleagues helped write it into basic American institutions. The churches regarded the Enlightenment as a sect itself. Revivalists called it "infidel," and overwhelmed it, while the more liberal religionists transformed it and absorbed it. The Enlightenment religion of the Republic or "publick religion" (today's "civil religion") is not institutionalized in churches or taught as the truth about life in university philosophy departments. Yet in an informal way it is the privileged faith of the American academy and public institutions.

Today the more militant religious groups repudiate all aspects of this public faith, both for its own Enlightenment ideology and for its congealing or combining of church religion. They see it not as neutral but as a wrong and sometimes potentially demonic alternative to their truth. Far from agreeing with Franklin that what they taught in particular was irrelevant to the Republic, they tend to find his Republic irrelevant and their teachings the be-all and end-all of existence. Hence the clash.

The second zone is what I call classic consensus or conventional religion, the religion of most Protestants, Catholics, and Jews. They often may conflict with some aspects of the code or practice in Publick Religion, but overall have made their peace with it. They were "present at the creation," as it were, and see much biblical faith in the public order. They have been in constant conversation with its articulators. A Baptist who repudiated Jeffersonian deism might team up with other founders of the nation against the French Catholic antiChrist, the Episcopalians who wanted to seat a Bishop in America, the British government when it favored Catholic faith in the Quebec Act, the established Congregationalism or Episcopalianism in nine colonies, or whatever they commonly regarded the enemy of the moment to be in the 18th century.

Visitors to America puzzled over the shallowness of people who clung tenaciously to their own denomination and then showed a blissful tolerance of each other and of public religion. Far from being shallow, these people stumbled on to sophisticated Augustinian and Calvinist ways of relating biblical special faith to republican general faith. Catholics did it through the tie that "natural law" made possible. Jews regarded the God of Israel as active among all nations. Protestants saw "common grace" or "civil righteousness" as operating in the world beyond the circle of those "born again." Somehow they made their peace.

I would not overstress the harmony of those days; battles of long ago tend to seem domestic down the long corridor of history. Catholics had to start their own schools when they saw Publick Religion combined with Protestantism dominating public education. Dominant groups in many locales tried to throw their weight around at the expense of minorities. Jews were often the losers here, or ethnic groups, or non-Mormons in Utah. Despite the problems, overall they all came to buy the concept of a dialogue in a pluralistic society and thus followed what I called the "rules of the game." Battles over the School Prayer decisions and proposed constitutional amendment show how tested that consensus was by 1962-63.

Suddenly in the mid-1960's the consensus broke. Blacks and other minorities, often on at least a quasi-religious ground and not necessarily using my terms, questioned the WASP character of Publick Religion. They wanted a rewriting of history and a new set of holidays and ceremonies. The War of 1967 led Jews to be concerned about survival and to seek to assert their own identity over against some Christian traces in public education. American Indians did not want their dominators to set the spiritual tone while overlooking their values. Ethnic groups of various sorts, Chicano and Eastern European among them, found religious appeals knotted and webbed with their concerns for peoplehood in education. Most of them played the rules of the game, however, and wanted other participants to recognize them and to play the rules as well. Then came what you are calling "the new religious phenomena," out of long roots but most visible after about 1967-68. Those were years of societal upheaval over the Vietnamese War, the racial revolution, "the military industrial complex" and establishments and power structures. Militant revolution was not changing American life, and many turned inward.

Phase One was what I call the intrusion of "old new religions." They were *old* because in the East or Africa, among American Indians or occultists, they were around before the Bible or the Enlightenment. But they were *new* to most Americans, who were unaware of the few stray Yankee Hindoos, Theosophists, Beat Zen poets, and precursors. This first new flowering came during the brief period of the counter culture, spreading from California to the centers of intellect and affluence, campuses, young adults' neighborhoods, suburbs. Some of the spread came as a rejection of conventional religion in "the establishment," and some of it was Oedipal, against parental attachment to staid institutions and explanations. Some grew out of boredom with the old and the freedom to explore the new, thanks to mass higher education and mass media, travel and affluence.

This is not the place to list and detail all the expressions of nonconventional faith. Many have come and gone. They are of interest now as survivors of three sorts. First, as a suffusive presence. Here they are the religion of the airport newstand and the college classroom, the surburban Y and its yoga and *Psychology Today* with its therapies. It is thus not so much institutional as literary, and suffuses or casts a glow over Western faith. Many mainline church meditators learned to meditate again first by going to the Orient spritually, not out of their own traditions. For the most part this zone creates few problems for public education precisely because it is no longer cultic. The second zone is even less disruptive, since it is wholly literary: secular people or church members read Zen texts or admire tribal and natural religions of the Indians.

The third sphere is the problematic one, the "hard core" cultic expressions. I refer to Hare Krishna, The Unification Church, Scientology, and countless tiny but locally very visible alternative religions. Members of these usually do not care for the common good except on their terms, or do not care for it at all. They are fighting each other and everyone else, and are extremely assertive of their rights. They do form "families" or communes and try to hold control of education. I do not know how large a presence they remain or will become in America. It is my guess that they have generally crested and attention is sliding from them, but locally they can exercise great power because they focus their energies while the rest of the community has diffuse interests.

The counter-cultural religions are dwarfed by the huge sub-cultural faiths, sub-cultural because they share some assumptions of the larger society but either then want to recast it or fight its tendencies. These I call the "new old religions." *Old* they are because our society is familiar with them, but they are *new* as militant expressions long after most people thought they were obsolete or buried. They are of biblical rootage, Jewish or Christian and often conservative Protestant, but they do not share classic consensus religion with its belief in dialogue and compromise. They must have it their way in the public schools or not at all. I refer to the many militant fundamentalists at the right of more moderate evangelicalism. Evangelicalism is hardly outside the consensus, unless we want to place the President of the United States outside it! But certain fundamentalists do not share his assumptions about the public weal. Some kinds of Pentecostalism are also belligerently distant from others, but they are less frequently political in outlook. Some Hasidic Jewish circles or defense leagues have challenged the consensus.

All of them refuse to play Benjamin Franklin's game. They insist they overlap and intersect or share with no other churches and certainly not with secular society. While the more flamboyant of these went the way of the counter-culture ("The Jesus People," "The Children of God") others are in the hands of generally staid and dead-serious workers and community dwellers, and thus create more issues and problems. Let us look at how some of these citizens voice concerns, gaining power again by their focality in the presence of people with diverse interests who hold less selective power:

Roman Catholics and many kinds of Jews and Protestants who in general belong to the consensus groups have spawned militant forces that will for some years concentrate on issues having to do with sex and the family. These include abortion, homosexuality, "living together," euthanasia, many subjects that come up in sex education or value theory. They have much continuity with their predecessors on the old church-state front, but among them are many who are ready to start alternate schools or take over school boards in order to have their curricular interests satisfied. They are in contact with the bishops and denominational leaders, but differ tactically from many of them.

Second are Protestants who tend to combine anti-evolution with right-wing politics or reaction to racial integration to the point that they start schools of their own or fight textbook battles over against "Publick Religion" and consensus churches. Add to these the growing extremely orthodox Jewish groups that want to remove themselves from the taint of larger society, the "patriot" groups that make much of religion in their ethos, and the like.

They educate in several ways. First, through their own "fundamental" schools. Anti-busing forces gave the great impetus to these, but theories of learning and anti-evolutionary contingents have contributed. Second, they form aggressive Sunday School — some fundamentalist churches own or lease as many as 200 Sunday School buses — where they disicipline children to withhold consent from the teaching process in the public schools at many crucial points. They educate by approaching adults on school boards or in communities at large and work on children through them. And they finally go through the motions of public education but withhold consent from what it sets out to do in relation to values.

In time they may subtly change the character of public education; it is also likely that some of them will begin to make compromises with the larger society. But for now they stand as agents of discord and disruption. In the political tradition that derives from Aristotle, a society like ours is a *communitas communitatum*. It is neither a totalist whole nor individualist atoms, but a cluster of many kinds of subcommunities, be they governmental, familial, educational, clubby, ethnic, religious or whatever. To stress community and not subcommunities leads to totalism. To stress subcommunities without concern for commonweal leads to Balkanization and anarchy. The founding fathers, with James Madison as a spokesman, took some comfort and sense of security from "the multiplicity of sects." If one prevailed, all others would lose freedom. If two or three prevailed, they would war over the spoils. If many survived, they would not be able to seize power. Today out of the "multiplicity of sects" have come people who have learned how to jab at the jugulars and touch points of society. Yet the larger society only at its peril tries to silence them or put them down.

What do educators do? I have to begin by saying that in accute stages we have to remember "you cannot win 'em all." No fates or gods assured us that everything will come out right. We have seen good, reasonable, humane, dedicated school boards and teachers simply overrun by hit-and-run experts on a single topic, and this will continue. But it is possible to anticipate and meet many situations.

1. *Leadership awareness.* Administrators, faculties, policy makers, and civic leaders have enough on their hands and minds to keep them from becoming expert sociologists of religion or anthropologists, but they would

do well to become more alert to recent societal changes. To understand a culture, to locate one's self in it, is both good strategy and, in the face of defeats, helpful consolation.

2. *Educate the community.* I believe that public schools have not made enough use of the experts, professorial and ministerial and lay, in each community: people who could help set forth "the lay of the land." If people understand more about the character of the Republic they can better learn how to fend off forces that do not care for it, assure liberties to opponents of consensus whom they do not find attractive, and support boards or teachers who are "on the spot."

3. *Make an opportunity of bad situations.* It is important wherever possible to "head 'em off at the pass," as the old Westerns put it, to anticipate trouble areas. But when surprises occur, we do well to remember Whitehead's theme that a clash of doctrines is not a disaster but an opportunity. Often disruptive or focal groups do, despite their sometimes treacherous ways, have their finger on legitimate critical issues. Some of them feel that they have had no voice in policy or are the floor for everyone else's self-esteem, and want to be represented. Why do people turn to such authoritarian groups today? What "broke down" in the culture to lead people to cults? There are ways to "teach about" society and religion to take advantage of some of the breakdown or tense issues.

4. *Wait.* Panic and overreaction often give publicity to groups that prosper under persecution. Some day the schisms in our society in 1977 will look no more traumatic than did those of 1777 in our retrospect. People keep being accommodated and they keep buying into the larger society, making their compromises. This will happen again in many cases, and a long patient policy may be better than the kind that needs a victory in every classroom and school district.

Have I anything good to say about these groups? So far they look like Huns and Vandals who invaded our rational Rome. Hard as it may be to see it in the midst of controversy, much that is good from our society has come from people Santayana called "rabid and pensive apostles of liberty," noncompromisers who saw what others did not. The maverick and the heretic against societal values sees what people who held them do not. Cognitive minorities often lead majorities to reform, even if majorities do not acknowledge the source. I have refrained from judging whether any of these groups are true or teach truths, whether they are beneficial in the lives of any of their adherents. No doubt they sometimes are. Our concern has been for their part in the commonwealth. Here they may be teaching us something again about the barbarian and civilization — and about the rest of us who consider ourselves civilized: that in the republic we need not always work for consensus but for a higher level of argument. The cultist is not interested in argument but only in freedom for himself and an audience for his or her opinions. Many examples in history show that such set-apart people sooner or later come to feel responsible for some larger share of society. It would be a pity if the majority did not discern that moment in the case of some of today's groups and failed to lure them into the dialogue and conversation simply because they feared what they would hear in its give and take. Little that I have said is of comfort to beleagured boards or faculties, but on a larger scale and landscape, it is possible to do better than we have done at keeping a vital tension in the concept of our fragile *communitas communitatum*.

CHAPTER VIII

THE AMERICAN POLITICAL SYSTEM AS EDUCATOR

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It is a privilege to be able to talk to America's most distinguished political educators about the American political system as educator. In a fundamental sense, all of American education is a function of the political system. You people are elected or appointed through political processes. All of our schools and colleges (even private ones) are either licensed or chartered by the state, and most of them are directly financed by state and local authorities. The overwhelming bulk of financial support for American education at all levels comes from tax levies and tax exemptions.

I have spent a good part of my professional life in the past 15 years trying to explain to educators how profoundly they are embedded in the nation's political matrix. Most Chiefs have always known this, but the innocence of others who should know better has been astounding. Education still pays a heavy price for the political innocence of its professional practitioners and its friends.

I must assume, however, that the theme of this Summer Institute is not addressed to the political system as the incubator of our formal educational establishment. Your attention is turned instead to the educative functions and services that are purveyed by the political system apart from its creation and nurture of the educational system itself. Following the lead of America's foremost historian of American education, Lawrence A. Cremin (who, I am delighted to note, will be winding up this institute), you are looking at the full range of educational forces that shape the minds of the citizenry. You are to be congratulated, for only by so doing can you get a fix on the special role of the formal education system in the total learning environment of the nation.

In the creation of this essay, I have frankly been astounded at the variety of ways in which the American political system does in fact educate. The truth is, the list is so long that I can do little more than suggest a few thematic examples. Let me concentrate on four: the political system as political educator, as economic educator, as technical educator, and as cultural educator.

First, the political system as political educator. In looking at the political socialization of children, David Easton and others have discovered the importance of the cop. A child's sense that parents are ultimate authority is drastically modified the first time the child watches a police officer give orders that Daddy and Mommy hasten to obey — usually with a highly deferential attitude. Subsequently, the President of the United States is first perceived by most children as a Super Cop who is to be local policemen what the local policemen are to Daddy and Mommy. By the time a child is subject to the authority patterns of the school, he or she has already learned the reality of authority patterns in the larger polity. In tough neighborhoods, the rudimentary political groupings and leadership structures of gangs reinforce a child's perception that in human affairs some people gain some kind of legitimacy for giving orders that others obey.

It is doubtful that anything in subsequent classroom learning is a more powerful educator of young people about the realties of political power than those early childhood experiences. Starting with infancy, then, the political system is an impressive political educator.

For adolescents and adults, political education is overwhelmingly a function of what the media transmit from key poltical actors. Theodore Roosevelt called the Presidency "a bully pulpit." He might as well have called it "a bully lectern." One of my most vivid memories when I was of high school age was listening with the rest of the family to FDR's fireside chats. They were, as you know, rhetorical masterpieces. Sometimes they gave more clarity to cause and effect, and a higher probability to the benign consequences of legislative therapy, than in retrospect were warranted. But for a people confounded by the inscrutability of blind economic forces, a strong and educative Presidential voice was an enormous reassurance. The fact that he tried to educate, rather than to overpower or to bypass, the citizenry was itself a piece of political education. For there were other models of political leadership abroad at the time — Stalin, Hitler, Mussolini — who looked at political educaton soley in terms of propaganda backed by terror.

Presidents educate directly through TV and radio. They educate indirectly through their messages to Congress, executive orders, and press conferences. They educate by their willingness to greet some foreign dignitaries, but not others; and by the agendas they establish with leading foreign powers and within the United Nations. They educate when they issue proclamations reinforcing national traditions. They educate when they campaign for office or for a party slate. They educate when they place their children in a public school. They eduate even when they misbehave. The consequences of their misdeeds loom so large that they dominate the nation's political thinking for months or years — witness Watergate.

Others besides the President, of course, shape our political education. It can be argued that the Supreme Court is a perpetual seminar in political theory. It is the definer and explicator of the evolving moral conscience of the nation rationalized in terms of our constitutional heritage. It has to educate, for as Andrew Jackson once pointed out, it has no troops. Its supremacy in our system rests, I firmly believe, upon the root fact that it is constrained through the educative devices of hearings and dicta to buttress legal and moral judgments with rational argument. In that sense, it gives to our political education both procedural and substantive content.

Cabinet members also educate. They educate when they testify before Congressional committees, or make public statements. Regulatory agencies educate when they hold public hearings and make quasi-legislative or quasi-judicial rulings.

The Congress is not only, to use Emerson's phrase, a standing insurrection, it is a sitting classroom in American and world politics. Its printed hearings, its Congressional *Record*, its committee reports, its daily snowfall of press releases and newsletters to constituents are all instruments of political education. It is true, of course, that aside from their use by lobbyists and columnists Congressional publications are not widely tapped directly. But through the diffusive processes of media and of scholarly publications, Congressional discourse and reflection become major reflectors and shapers of the diverse views of the nation.

To a greater or lesser degree, chief executives, legislators, and judges at state and local levels are all powerful shapers of public views and attitudes towards politics and policies. I had the privilege once of serving as mayor of the city of Middletown, Connecticut. I was at the time teaching politics at Wesleyan University. In both cases I was trying to extend the knowledge and insights of others about the American political system — refining my own understanding in the process. I remember one occasion when my Director of Public Health, a rather officious type, wanted to have fines slapped on any first offender who broke the sanitary codes applicable to food stores and restaurants. Partly from political prudence, partly from honest conviction, I asked him to start by launching a series of open seminars on the laws and regulations governing food handling — inviting all food-store and restaurant operators to attend. I believed then as I believe now that education is half the battle of law enforcement. I concur with Plato that persuasion, not coercion, is the divine element in the world.

Political leaders learn from the citizenry — that is almost a definition of democracy. But they are also major educators of the citizenry about both policies and politics. It is this process of two-way political education — so traumatically but triumphantly played out during the tragedies of Vietnam and Watergate — that is the hallmark of our form of government. We do too little in our schools and colleges, I think, to prepare young people to participate in the lifelong educational colloquy of politics. It is the glory and meaning of our political system. It is the ultimate justification of a free press. It is continuing education in its richest sense.

If the political system is a major instrument of our political education, it is also a major factor in the nation's economic education. In one sense, this has always been true. We all remember Hamilton and Gallatin and Clay and Jackson in part because they educated the nation in the prevailing economics of the time. Perhaps the most famous political address in American history, William Jennings Bryan's "Cross of Gold" speech, was an attempt to educate the nation in the largely specious economic arguments of the late 19th century. What is the message of Hofstadter's great book on *The Age of Reform*, but that the entire political system became an enormously powerful instrument of economic education in the latter part of the 19th century and early part of the 20th century. Many of FDR's greatest fireside chats were centered on economic education of the public. The Supreme Court spent most of the 19th and early 20th centuries on cases interpreting to the public (some of us would say in retrospect, "miseducating the public about") economic rights and privileges.

In more specialized terms, the informational services of particular Federal departments and agencies have for more than a half-century been economic educators for particular audiences: the statistical series of the Departments of Labor, Commerce, and Agriculture come to mind.

But all this pales into insignificance compared with the macroeconomic Federal indicators that presently help to shape the economic education of the nations of the world. Tune in any day or night, read any major newspaper or weekly journal of opinion, someone is quoting the President's Council of Economic Advisors, the Treasury, the Department of Commerce, or the Board of Governors of the Federal Reserve. The GNP is up or down, new housing starts are up or down, prices are stable or unstable, inventories are thinning out, the dollar is slipping further on the international exchange.

There are, of course, some privately-run series: Dow-Jones, Standard and Poor. But the great economic educator of the nation is the Federal government. My first major book, *Congress makes a Law*, was a study of how the Employment Act of 1946 came to be passed. Although that important piece of legislation was presaged in some ways by both the Federal Reserve Act of 1914 and the Budget and Accounting Act of 1921, the essential contribution of the 1946 Act was its creation of two new Federal instrumentalities of economic education in the nation: the Council of Economic Advisors in the Executive Office of the President, and the Joint Economic Committee in the Congress. Both the CEA and the JEC have for thirty years been the nation's major seminars in macro-economics.

Within the last three years, a third Federal instrument of economic education has been added: the Congressional Budget Office. Under the able leadership of Alice Rivlin, CBO has brought order to the fiscal chaos of legislative authorizations and appropriations. Budget ceilings have been set. The nation has been privy to committee hearings and floor debates designed to reveal to the Congress and to the public at large the distinction between what Rousseau once called the "will of all" and the "general will" — the "will of all" being the sum of separate interests, and the "general will" being the articulation of policies designed with a larger "public interest" in mind. To be precise, if the net result of the Congressional pork barrel and of appropriations log rolls is to set loose a runaway inflation, special interests may benefit temporarily, but the interests of the general public are cruelly penalized. The function of the CBO and its related budget committees in the Senate and the House is to plot the consequences of Congressional actions with the dynamic stability of the entire economy in mind. It is difficult to imagine a more impressive educative function. All of this is not to pretend that there is a single authoritative Federal voice, or even several voices, giving us some sacred truths about the economy. Experts, including Federal experts, differ about figures and trends and their meaning. Economic therapies can produce grotesque side effects. Tradeoffs are pervasive; high tariffs protect some industries but limit exports for others; more energy means a dirtier environment (as Alvin Weinberg used to say at Oak Ridge, "All power pollutes, and absolute power pollutes absolutely."); full employment may be inflationary. But all of these anomalies and contradictions are also educative — they gradually hammer home to the public that there are no free lunches, no simple solutions, no easy dividends. An awareness of these economic realities means that we are maturing as a people. Part of the solemn temper of our times is a product of the economic education being given to us by the political system. Twenty years ago Michael Oakshott put it starkly:

"Politics is an activity unsuited to the young, not on account of their vices, but on account of what I consider to be their virtues. Everybody's young days are a dream, a delightful insanity, a sweet solipsism. Nothing in them has a fixed shape ... Everything is a possibility ... Since life is a dream, politics must be an encounter of dreams in which we hope to impose our own. But when we have passed what Joseph Conrad called 'the shadow line' there is disclosed to us a solid world of things, each with its fixed shape, each with its points of balance, each with its price, a world of fact, not poetic images, in which what we have spent on one thing we cannot spend on another, a world inhabited with others besides ourselves who cannot be reduced to mere reflections of our own emotions. To rein in one's own beliefs and desires, to acknowledge the current shape of things, to feel the balance of the world in one's hand is a difficult achievement, not to be looked for in the young." (Quoted by Henry Fairlie, "Camelot Revisited," *Harper's*, January 1973, p. 67.)

Oakshott could have been speaking of a young nation as well as of young people. Increasingly the economic education given to the citizens by their political system helps them to mature — even as it destroys comfortable illusions. Perhaps this is the true meaning of Carlyle's definition of economics as "the dismal science." But if we as a people can be educated to understand the twin economic concepts of "trade-offs" and "maximization," we may save ourselves and our successors vast discomfort or worse in the years to come.

I turn in the third place to the political system as technical educator. Ours is, in large measure, a civilization of gadgetry and practical arts. No matter where we look we see people attempting to cope with technologies that both ease and complicate their lives. Have you ever taken a look at the "How To ... " books and pamphlets published and disseminated by all levels of government: "How To Install A Septic Tank," "How To Fight Gypsy Moths," "How To Fish For Smallmouth," "How To Build A Barn," "How To Navigate," How To Choose Edible Roots," "How To Recognize Cancer Symptoms," — the list is endless. Sometimes these are disseminated without charge; sometimes there is a nominal fee. But the political system through government publications is an enormous educator in all kinds of technical fields.

In a number of areas, governments use field agents. One of the glories of the world is American agriculture whose triumph is in no small measure the work of county agents — itinerant technical educators who have disseminated to individual farms technological and scientific breakthroughs of government-sponsored agricultural experiment stations. Similarly, the Small Business Administration has educated tens of thousands of small businessmen in the techniques of running a small enterprise. All of us receive a daily education in the vagaries of the weather through the work of government meteorologists.

For millions of our younger citizens, the Armed Services provide a vast variety of technical courses that have both military and civilian pay-offs: courses in computer technology, engine and machine maintenance, electronics, surveying, mapping, celestial navigation, radio, nuclear power, radar. Many of these courses, through the Office of Educational Credit of the American Council on Education, are certified for scholastic and academic credit in civilian institutions.

Increasingly, but still inadequately, government sponsors technical training for unemployed young people: MDTA and CETA job training, various programs of the ACTION agency, youth conservation work as in California.

And all of these, of course, are in addition to technical training provided in prisons and in inservice training programs organized by the civilian branches of governments to improve the technical and managerial capacities of their workers: foresters, ship builders, space mechanics, control tower operators, building inspectors, police detectives, state highway engineers, communications specialists. I do not know that the inservice training activities of our political system have ever been totaled, but the amount spent on such educative activities must run into the tens of millions of dollars each year. And all of this has an incalcuable multiplier effect as trained parents pass new skills and knowledge on to each other, to their children, and to friends.

Finally, what of the political system as cultural educator? I must start with the city of Washington itself. One of the delights of our most recent five-year tour in that city has been to savor its cultural renaissance. The Mall is now a glorious, permanent midway. Every year millions of Americans visit the Museums of Natural History, Space and Aeronautics, Science and Technology; they linger in the Mellon Art Gallery, the Hirshorn Museum of Modern Art; they tour the monuments to Washington, Jefferson, and Lincoln — renewing their sense of identity with our inherited political culture; they stand in line for a glimpse of the White House, and drive past Lady Bird's flowers along the Potomac. In the evening they can take in the theatre, opera, ballet, or symphony at the Kennedy Center for the Performing Arts. Cheek by jowl to the Congress and the Supreme Court is the magnificent Library of Congress — perhaps America's single greatest cultural resource. Visitors may fly out of Dulles Airport which, however inefficient in strictly economic terms, is surely one of the most beautiful expressions of functionalism in the entire world of architectures.

Through increasing appropriations to the National Endowment for the Humanities and the Arts, what is already happening in Washington is gradually being promoted across the land. The government support is woefully insufficient. Museums, libraries, and performing arts centers are being cruelly hit by inflation and by the drying up of traditional sources of private support. I commend to you the American Council for the Arts in Education's recent book, *Coming to Our Senses: The Significance of the Arts for American Education*, which calls for a new national commitment to the support of our cultural life. But, the fact remains, if we look at what the political system is already doing for the quality of our lives through support for parks, playgrounds, zoos, arboretums, museums, performing arts centers, historic building preservations, historical markers, national monuments, libraries, gardens — and publications related to most of these — we cannot help being impressed by the primacy of the political system in the field of cultural education.

So much is going on all the time about which most of us are tragically unaware. Recently in reviewing my file of news bulletins called *Higher Education and National Affairs*, put out weekly by the American Council on Education, my eyes caught a short squib dated November 7, 1975, with the headline "History of U.S. Art Depicted in New Film." The story read as follows:

"A motion picture depicting the history of art in America during the past 200 years has been produced by the National Endowment for the Arts and the Sears-Roebuck Foundation. The 28-minute film in color and sound contains more than 18,000 images tracing the evolution of American art from colonial craftsmanship to pop/rock. More than 50 museums, galleries, and libraries supplied art works. Its New England premiere will be held in Boston November 10 at the annual meeting of the American Association of State Colleges and Universities. The film ... is available to clubs and groups on a free loan basis through local film libraries ... "

During the past two years this is only one example of the dedicated efforts of various parts of our political system to recapture in the context of the Bicentennial the cultural richness of the American adventure. All of us have been further educated by these endeavors.

Recently I was appointed to the Carnegie Commission for Public Broadcasting to review the past decade of public television and radio and to make recommendations for the future. All is not well in public broadcasting in this country. Even so, through financial support from the political system, as well as from private sources, our nation's cultural life has been enomously enriched by the best of what public channels have produced or disseminated. I need only mention *The Adams Chronicle*, *Sesame Street*, *The Forsyth Saga*, *Upstairs, Downstairs*, *Civilization*, and *The Ascent of Man* to make my point. In this context, we owe a substantial debt of gratitude to the British government for its support of creative artists who, through public broadcasting in their country and ours, have made life richer for hundreds of millions of people.

Ahead of us are the marvelous opportunities for cultural enrichment made possible by the development of satellite transmitters — part of the spin-off of the space decade of the '60s. Increasingly, we shall be able to bring to the American household the cultural wonders of the world. The creative artists of every country, with all of the rich diversity therein implied, will soon be available via satellite to all people across the face of the globe.

I have only scratched the surface. The political system, directly and indirectly, is one of our greatest educative instruments. We have not learned yet to appreciate fully what it does, or what it can do, as an educative instrument. Much of its educational impact is infusive and suffusive.

But if the educational effects of the political system were to suddenly disappear, we would surely feel the difference at once. We would together share a great anguish of deprivation.

Great political systems have always been great educators. Among other things, they have set the conditions and the spirit within which individual growth has taken place. This was true of Elizabethan England, of the Roman Republic, and most certainly of fifth century Athens. As Edith Hamilton pointed out in her classic and beautiful book *The Greek Way*, "The Greeks were the first intellectualists. In a world where the irrational had played the chief role, they came forward as the protagonists of the mind."

And Edith Hamilton summarized for us the political ideal that emerged from this flowering of the intellect.

"The idea of the Athenian state," she wrote, "was a union of individuals free to develop their own way, obedient only to the laws they passed themselves and could criticize and change at will. And yet underneath this apparently ephemeral view of law was the conviction peculiarly Athenian which dominate the thought and the art of the 5th century — that the unlimited, the unrestrained, the lawless, were barbarous, ugly, irrational. Freedom strictly limited by self-control — that was the idea of Athens at her greatest."

What higher goal for education can there be?

When will our own political system learn that the inculcation of this ideal is its highest educational responsibility?

CHAPTER IX

THE AMERICAN ECONOMIC SYSTEM AS AN EDUCATOR

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Education in the larger sense of the word consists of all human learning experiences, from womb to tomb. It includes what we learn from our constant exposure to sense data from the world around us; it includes the learning of language in early childhood and the enormous amount of information which enters the mind through language in all subsequent years; it includes what we read, what we see on television, hear on the radio, see on the stage or in movies, all that we hear or overhear in conversation, and a vast flood of information input that streams in upon us almost every moment of our lives, even to some extent in sleep. It includes also the self-generated information, of which the human brain generates an enormous quantity all the time — in thoughts, ruminations, imaginations, which constantly interact with the inputs from the outside world in order to structure the brain into images, the universe within which corresponds in some sense to the universe without, however imperfectly, In these enormous processes we also learn values and evaluations, we learn preferences, we learn to criticize these preferences, we learn to persuade and to be persuaded, we learn a vast variety of emotions and attitudes, we learn by trial and error, by disappointment and failure, with images of fact and images of value interacting constantly in an immensely complicated process of cognitive growth.

We enter the world with a brain, largely unstructured, with some genetic structures but a vast potential for learned structures. A baby is like a settler going into an empty land: as the child grows and matures, vast structures of the mind are built, internal cities, roads and farms, in a process that ends only at death, though before then, in senescence, the rate of depreciation of these structures may exceed their replacement and expansion. In this enormous process formal education is only a fraction; what fraction of course varies with the individual and is hard to measure, but for most people it is probably not more than 10 per cent of total learning; though if we include the fact that formal education is strongly concerned with teaching people how to learn, its total effect may be much larger. Teaching people to read, for instance, enormously increases their capacity for future learning, and indeed this could be regarded as the major task of formal education, to expand the learning capacity of the student more than to teach actual content, though this too should not be neglected.

Among the types of learning experiences outside formal education, personal contact with the economy is certainly one of the most important. These are the experiences which build up "folk knowledge" about the economic environment of the individual. Everybody in our society, and indeed to some extent in all societies, grows up into an exchange environment. Even as children we learn how to spend money and perhaps even how to earn it. Everybody is familiar with shops, with prices, with jobs and wages. Large numbers of people have bank accounts and savings accounts, and are acquainted with interest, insurance, union dues and membership. Almost everybody is exposed to large quantities of advertising on television, in newspapers and magazines, on the radio, and so on. Most people have some personal experience with unemployment, of moving between jobs, of shifting from one store to another, one brand to another. As we move up the scale of complexity, fewer and fewer have personal experience with certain elements of the system: only about 10 per cent of the people ever buy and sell stocks, a much smaller percentage than that deal in commodity futures, and the subtleties of corporate finance are experienced only by a very few. Such mysteries as mergers, even collective bargaining, are again experienced by a very few. We can arrange elements in the exchange environment from those which are virtually universal and that everybody experiences, to those which only a very few people experience, with all sorts of gradations in between.

The exchange environment forces budgeting and economizing on virtually everybody. We are all conscious that there are certain things that we cannot afford. We are conscious that if we buy one thing we cannot buy another, and that we have a problem of allocation of scarce resources, in this case, our income, among competing uses, which are the different lines of expenditure. Large numbers of people are aware of credit in one form or another, whether consumer credit, house mortgages, or even the loan shark and the pawn shop, which expand resources, at least temporarily. Large numbers of people are aware that we can shift our total purchases from the present into the future if we save, and from the future into the present if we borrow.

Actual business experience — that is, the taking of responsibility in running a profit-making enterprise — is confined to a relatively small proportion of the population, perhaps not more than 10 per cent. Experience in profit-making, in actually running a business, in hiring labor, buying materials and selling a product, and making profits, is really quite rare. It was one of the social virtues of the consumers' cooperative movement that it gave a certain number of people who would otherwise have had no personal experience of what it meant to run a business an opportunity to participate, even at times painfully, in this process. People whose income is derived wholly from wages, salaries or grants often have very little idea of the risks and the strains involved in undertaking and being responsible for a business enterprise.

For most people also, contact with government is quite peripheral. We pay taxes — often rather unaware in the case of commodity taxes, though we are highly conscious of paying income taxes and real estate taxes. We may have some contact through welfare payments or zoning restrictions, but on the whole it is a fairly small proportion of the people — say 20 per cent — who either participate in government as civil servants, or experience the impact of government regulations. Government impinges on most people at second hand and they are often quite unaware of its impact. Things like tariffs, antitrust laws, government subsidies, environment regulations, and so on, affect a large majority of people only indirectly. It is not surprising, therefore, that so many people are insensitive to government, that many people do not even bother to vote, and for a large proportion of people political activity consists in voting once or twice a year. It is only a very small percentage of the people that form pressure groups and public interest groups, and so on. The government is like the weather — we notice it only when it fouls things up. Ordinarily, most people simply take it for granted and they are perhaps particularly unaware of the impact of government on economic life.

The folk knowledge of the economy, which is derived from the kinds of experiences mentioned above, is frequently quite accurate in local environments. Everybody who shops has a pretty fair idea of what commodities are available at roughly what prices. Some things will appear "dear" and people will turn to substitutes that are "cheap." At the local level folk knowledge is fairly accurate simply because it has rapid feedback. We soon find out when gas stations run out of gas, when coffee prices double. Nevertheless, there are important failures of folk knowledge, particularly in regard to larger systems, of which it is hard to have personal experience.

Thus, from our ordinary experience we do not get much sense of the nature of the price system or any total picture of the economy as a whole, in its structure and proportions. We take the supermarket for granted without understanding the complexity of the processes by which it is kept stocked. People may be vaguely aware in general that prices are rising; they are unlikely to be aware of the processes by which inflation takes place, or the connections, for instance, between inflation and the total money supply or the total budget deficit. Almost everybody likes to buy cheap and sell dear, without realizing that if the price system is distorted too much even in directions which seem favorable, there may be large, and perhaps unfortunate, consequences. There is very little sense in the general public of the importance of relative prices in insuring that markets are cleared and that goods are generally available, and little understanding of the fact that price control can easily bring shortages and surpluses. People have very little understanding of the effect of tariffs, quotas or specific taxes on commodities.

The folk knowledge of the economy gives very little understanding of the overall social function of profit. Large numbers of people with no experience of business think of all profit as "gouging." They have little sense that profit comes from risk bearing, from leaving the secure haven of government bonds and savings accounts and venturing out onto the stormy seas of hiring and firing, of making and selling, of giving employment and hoping to reap the rewards. The Marxist picture of the employer as an exploiter of the laborer who "really" makes the product is quite widespread even in capitalist societies. There is little understanding of the role of the employer or of the capitalist in organizing production and taking the incoherent potential of labor and turning it into activity which can produce a product. Most people, even graduate students in economics, tend grossly to overestimate the proportion of the national income which goes into profits. This is actually on the order of 10 per cent of total income, over 75 per cent now going to wages and salaries. There is a general feeling that somebody somewhere is making enormous profits which can easily be siphoned off as a vast source of revenue.

Folk knowledge gives very little understanding of economic fluctuations, or of the remedies which might be taken to overcome them. Most people are unaware that there is a depression until either they or a neighbor down the street loses his job. Unemployment statistics mean very little to people who are still employed. The dilemma of raising employment at the cost of a higher rate of inflation is something that we do not learn at our mother's knee or at the supermarket. The role of banking policy or of the public deficit is very little understood, although over the last generation economists do seem to have persuaded large numbers of people that government deficits are wonderful and that the public debt is nothing to worry about. But still extraordinarily large numbers of people do worry about the national debt, more perhaps than is necessary, simply because they argue by analogy from personal debt into national debt.

Finally, folk knowledge tends to give us very little sense of the long run, of the sort of problems we may encounter in the next fifty or one hundred years. There may be some logic in that, but it is hard to expect people to be wildly concerned about things that are going to happen after they are dead or after their children or grandchildren are dead. Large numbers of Americans, for instance, feel that the energy crisis is a fraud, or is just the result of manipulation on the part of the oil companies and the government, and that oil and gas will go on forever. Few people see the relation between the price of anything and the degree to which it will be conserved, or see cheapness as an encouragement to waste.

The next question is whether formal education in schools, colleges, and universities can remedy the failures of folk knowledge in regard to the understanding of the economic system. It is indeed one of the major functions of formal educational institutions to remedy the failure of folk knowledge in all fields and to give people skills which enable them to transcend their own personal experience and to obtain images of larger systems. The answer seems to be that in regard to the economic system there is a pretty massive failure of formal education, in spite of the efforts of organizations like the Joint Council on Economic Education in New York and its branches around the country, in spite of the efforts of the American Economic Association through its Committee on Economic Education. The rude fact seems to be that only a relatively small proportion of people in this country, or in any other, go beyond what folk knowledge and the ordinary experience of daily life can teach them about the economy.

There are many good reasons for this. One is that teachers, especially at the elementary and the high school level, are rarely trained in economics. A considerable proportion of social studies teachers, for instance, have had no course in economics. They come out of majoring in history or geography, or even sociology and political science. The teacher below the college level who has had a major in economics is quite rare. Partly perhaps this is because majors in economics tend to be siphoned off into more remunerative occupations — in banking, corporations, or government — whereas people who have majored in history, or even other social sciences, often find teaching the major avenue open to them for earning a living.

The absence of teachers is reflected, also, in the absence of teaching materials and textbooks, which in this area are generally of rather low quality at the grade school and high school level, with a few notable exceptions such as the materials prepared by my friend Larry Senesh.[1] There are, unfortunately, good reasons for this too. Academic economists on the whole are confined to college and university teaching and have rarely devoted themselves to the problems of exposition and publication at the grade and high school level. Businesses, both individual corporations and local and national business organizations, have often put out a large volume of materials which are supposed to educate people in the schools in the principles of economics. For the most part, though, these too have been of low quality, and again for a very good reason — the business of business is business, not teaching. The businessmen who support these ventures tend to be poor judges of their quality, as publications in this area often tend to be propagandistic, and the propaganda frequently backfires and produces quite the opposite effect from what was intended.

Another very good reason for the failures of formal education in this field is simply that other priorities tend to crowd it out. Particularly at the level of the grade schools and high schools, the sheer business of learning how to learn, of learning the tools of learning — in the reading of increasingly advanced materials, in writing and expression, in mathematics and statistics — are so time consuming that the "content fields" tend to be squeezed anyway, and of these, economics is often regarded as difficult, rather dull, and much harder to teach than, say, history or geography, or even politics. The educational system indeed has so many good reasons for doing as badly as it does in this matter that it is hard to take a high moral line with it.

The final question, therefore, is, does this failure matter? Does it really matter that we are turning out large generations of economic illiterates, people whose knowledge of economic processes will be learned only from daily life and their own immediate personal environments? What people learn in daily life indeed should not be despised and it is very important to them. It often tends to be more accurate than the book learning of the schools, simply because their mistakes lead to failure and failure leads to learning. Even the folk knowledge, of course, can be improved, and indeed a good deal of what goes by the name of economic education in the grade and high schools is little more than the improvement of the folk knowledge, that is, a consumer education — teaching people how to open bank accounts, how to understand insurance contracts, and so on. There is certainly nothing wrong with this, but if that is all that there is the deficiencies of folk knowledge remain.

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[1] Larry Senesh, *Rocky Ford: A Community Social Profile* (1976), one of the volumes developed in the Colorado System-Based Curriculum Project, funded by the National Science Foundation, 1976 –

In assessing the importance of the failure of the educational system to overcome the failures of folk knowledge, we can distinguish a whole spectrum of possible positions. At one extreme there is the view that this failure does not matter at all, that decisions about the larger economy are going to be made by a very small group of people who really run things in business and in government, so that if these people understand the economy that is all that we need. The ignorance of the majority of people does not harm us much because they never have to use the knowledge of which they are ignorant. It must be admitted that there is something in this view, though it is perhaps a little too comforting to be really comfortable. If the one per cent of the people from whom the makers of economic policy in government and in private organizations are drawn are reasonably sophisticated in these matters, then on the whole they will make fairly good decisions and the economy will run well, whether the 99 per cent of the people know anything about it or not.

At the other end of the spectrum we can take the view that widespread ignorance of economic reality is very dangerous because it leads to the rise to power of people with unrealistic views of the economy, who make large promises which cannot be fulfilled, who will make bad decisions the consequences of which are multiplied because the decision-makers are powerful. This problem is likely to be particularly acute in highly democratic societies, where the rise to power depends on the ability to please large numbers of people.

The point where this pessimistic view is likely to have some plausibility is in regard to special interest policies which benefit a few people noticeably at the cost of injuring large numbers of people imperceptibly. Many economic policies, such as tariffs, quotas, quantitative restrictions, subsidies, transfers from federal, state, and local governments, and so on, have this property. In many cases the aggregate cost exceeds the aggregate benefits, but the benefits are enjoyed by a small group of people and hence are very visible, and the people who enjoy them are vociferous and exercise large political weight, whereas the costs are widely diffused and are hence unnoticeable except in a very sophisticated view.

The worst possible case, of course, is that in which both the ordinary people of a society and its leaders are economically illiterate, so that the leaders with the consent of the populace enact policies which are in fact destructive of human and economic welfare. There are enough examples of this, of societies which have messed things up economically, to make this a real worry. The contrast, let us say, between Japan and Indonesia, or between Canada and Argentina, is an illustration of the devastating consequences of economic illiteracy at both the top and bottom of the society, as compared with the success of economic literacy at the top, even though there may not be much at the bottom, or even in the middle. This, however, is a problem for the colleges and universities rather than for the grade and high schools, for it is in the colleges and universities that trained incapacity and inspired ignorance, which seem to govern the economic policies of many countries, are carefully learned. If the level of economic literacy in the universities is low, we cannot expect much from the lower schools.

In spite of these potential difficulties and the fact that the educational system, like any other, finds it quite easy to go from bad to worse rather than from bad to better, there is a case for at least modest optimism in regard to economic literacy. In the last thirty or forty years there have been many cases around the world in which economic literacy has clearly been improved. This is particularly noticeable in the United States, where, for instance, Herbert Stein[2] has traced the growth of economic sophistication, at least in regard to depressions and unemployment, from Herbert Hoover's tax increase in 1932 — the worse possible thing to do in the Great Depression — to the Kennedy-inspired tax cut in 1964, which seems superficially at any rate to have been a great success, and may be given partial credit for a decade without a serious depression. The academic scribblers of one generation, as John Maynard Keynes himself remarked,[3] produce the conventional wisdom of the next, and insofar as this is so, it is certainly important that they scribble right. Mistakes in theory can do great damage in the practical world if they result in false images of the processes of society. Even in the socialist countries we see a kind of a learning process which is almost a folk learning by the powerful. Lenin had to retreat from communism in the new economic policy of 1922, Stalin had to retreat from the first collectivization of agriculture in 1932, Mao had to retreat from the "great leap forward," that turned out to be a great leap backward, and from the Cultural Revolution. One wishes that the "learning of the powerful," which is so costly in terms of human misery, could be done more cheaply and vicariously through academic education, but the failures of the academics are notorious enough so that one cannot be too hopeful about this. The fact that it is usually much cheaper to make mistakes in schools than it is to make mistakes in the outside world gives one hope that the schools can continue to perform the enormously important function of cheap learning, even about large and difficult systems.

A question which is particularly important at the present juncture is whether the system of formal education can become more sophisticated about its own position in the economic system. We are all aware that formal education is a declining industry, simply because of the decline in births in the past. Formal education up to now at any rate has had a very age-related market and been age graded to a degree that is almost certainly excessive. The spectacular decline in births which took place in the United States in the 1960's and has persisted in the 1970's has already had a massive effect on the grade school and high school systems and will move into the colleges next year. In a day when infant mortality has been virtually abolished the number of pupils, let us say age 12, is almost exactly equal to the number of children who were born 12 years ago. The "bulge" in births from about 1947 to 1961 moved through the school system, is now still in the colleges. The trough of 1965 on is already in the grade schools, to a considerable extent in the high schools, and will move into the colleges in the 1980's.

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[2] Herbert Stein, *The Fiscal Revolution in America* (Chicago: University of Chicago Press, 1969).

[3] John Maynard Keynes, *The General Theory of Employment Interest and Money* (New York: Harcourt Brace and Co., 1936).

What the educational system faces, therefore, is a management of decline. Unfortunately, we are ill-equipped to do this, for almost all the managerial skills of the present generation of managers of all kinds have been learned in periods of growth. Decline, unfortunately, is much more difficult to manage than is growth. Growth-trained managers are particularly likely to do it badly. In particular, the whole question of the finance of the educational system becomes much more acute in a period of declining enrollments when all capital structures are likely to become top-heavy, both in buildings and in personnel. The managers of education, therefore, need to pay very careful attention to the sources of income of the educational industry, particularly the extent to which it is derived from grants and the extent to which it can be produced by exchange. Particularly corrupting at the moment is the tendency for granting agencies, such as state legislatures, school boards, and ultimately voters, to increasingly interfere in detail with the management of these grants, and to withdraw trust and confidence from the managers. Hence the granting agencies often destroy any opportunity for increased efficiency or for real solutions for the problems involved. This utterly destroys flexibility of management and the ability to devise ingenious solutions to these somewhat unprecendented problems. Real responsibility falls between everybody's stools in the frantic and ill-considered search for "accountability."

In these days indeed there is an acute need for a rethinking of the whole pattern of educational finance. In the great period of expansion we came to rely more and more on grants, especially from government authorities, to finance education, and less and less on the market through fees and through private borrowing. Grants, however, tend to produce subordination, to impair the status of the recipients, and often to destroy the potential for change and adjustments. Whether we can get the educational system out from under the grants economy to some extent is a critical question to which far too little thought has been given. The proposals of Professor Killingsworth,[4] for instance, have a great deal of merit, but are hardly anywhere taken seriously. This would take care of a large proportion of the finance of higher education through setting up a system of educational banks which would advance the students the full cost of their education, which the educational institutions would be compelled to charge, the loan to be repaid by a surcharge on income tax for the rest of the student's life. The basic argument is that education — especially higher education — is an investment for the individual, a private good more than a public good, and should be financed accordingly. This is certainly not appropriate for grade schools, though it is worth considering at the high school level.

Our experience with things like the GI Bill of Rights after the Second World War has suggested that up to a point subsidizing the students may be a much better form of the grants economy than subsidizing the institution, for the institutions then have to compete for students rather than for grants. Subsidizing students or even parents is not, of course, necessarily the same thing as educating the students. But at least it would seem it has a fair chance of promoting education, rather than a system such as we have at present in which the rewards to the educational system are all too often completely independent of what happens to the students.

Perhaps all this is a pipe dream, but if economic education could begin with the economics of education itself, not only might this be good for education, but it would demonstrate to the educators that economics is indeed relevant and that it should have a larger place in the curriculum. But perhaps this will not happen until economists themselves improve economics.

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[1] Charles Killingsworth, "How to Pay for Higher Education," paper presented to the Economic Society of Michigan, 1967 (mimeo).

CHAPTER X

The Business/Industry/Labor Complex as Educator

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Listening this morning to Kenneth Boulding's fascinating discussion of The American Economic System as Educator, I found myself thinking back to those opportunities college forensics occasionally offered to cross swords, at least words, with visiting debate teams from one or another of England's great universities. I remember trying to understand the magic of their commingling wit with wisdom so that each enhanced the other. I couldn't compete then and I can't now. Professor Boulding remarked in passing on the "suffering of the people in Washington from delusions of certainty." Though I cannot disclaim either that domicile or occasional exposure to the symptoms he describes, I would diagnose my own malady of the moment differently: as an inhibiting consciousness of comparative inadequacy to illuminate further this subject you have assigned both of us, even if under different titles.

What is basically important in the roles of The American Economic System or The Business/Industry/Labor Complex (whatever this slightly sinister sounding term may mean) as Educator, involves the influence that youths' prospects for the future have on their learning. Students' attitudes and interests, their aspirations and motivations, are unquestionably affected by the opportunities they see ahead for them. Particularly when we are young, we tend to concentrate our learning on what we think we are going to be able to use, especially to economic advantage.

I suspect the learning process is strongly affected, too, by the images young people develop in their minds of men and women who have apparently succeeded — as the media and the tax collectors measure success — in leadership roles in private enterprise.

Perhaps the most interesting issue involved here is how youths' education is influenced by the idolatry in the business/industry/labor complex of the gospel of the Grossest National Product in history or in the world.

Yet even as I begin to flirt with heresy, I realize that while these philosophical aspects of today's subject are part of Professor Boulding's assignment they are not included in mine. Your inquiry of me is really about the operational aspects of this relationship. How does, and can, and should the functioning of business and industry and labor relate to the carrying out of the educational process?

You and I have talked together before about the most obvious aspects of this subject: the implications and the potential of "career education," the possibilities of work-study and cooperative education programs, the developing of more effective career counseling and guidance procedures through the collaborative efforts of those with academic credentials in this profession and others whose contribution derives from other types of employment experience. Recognizing that none of us would remember much of what we either said or heard at those earlier meetings, it still seems better to simply incorporate here by reference the substance of whatever has already passed between us.

So I should like this afternoon to try to explore another dimension which seems to me to be developing in this relationship between what we call the worlds of education and of work, though this shorthand serves the demands of dialogue only at some considerable expense in clarity. Indeed this broader dimension doesn't really emerge until we straighten these terms out a little.

Both the established institutional patterns and our thinking about this subject are affected strongly and are warped by the assumption that "education" covers only what young people do in that relatively discrete period of their lives which starts with their entering the doors of a schoolhouse at the age of four to six and ends with their going out through other schoolhouse doors — with diplomas or degrees or sometimes less ceremoniously — sometime between the ages of 16 and about 22 or 23. It is part of this assumption that "education" takes place, by its nature, in the course of a single, increasingly long session. Our term for any interruption of it is "dropping out," which has funereal overtones.

I guess I think that the role of the business/industry/labor/ complex as educator — given that traditional concept of education — is a relatively limited one; that it is indeed important to do still more than has yet been done to develop the potential of collaborative processes for enriching career education, vocational education, experiential learning programs, and effective career guidance and counseling procedures; but that we at least have those possibilities fairly clearly in mind.

Suppose, however, we were to put the question a little differently: Not, what is the role of the employment world in education? Rather, what are the *reciprocal* roles of the educational and employment institutions and processes in administering the changing relationships between — using the conventional phrases — education and work?

The point in remolding the question will be evident from brief suggestion of the changes which have taken place in recent years in this education-work relationship.

Just a generation ago, at the half-way mark in the century, the passage from school to what came after it was virtually standardized and relatively routine. There were only two courses; you went on to college or you didn't. There was almost always a precise point in time when education ended and work started; the terms "graduation," "commencement," and "dropping out" reflect the suddenness of the happening.

Twenty-five years ago three out of every four boys and girls completed their schooling, once and for all, between the ages of 16 and 18; then they went to work, either in paid employment in commerce or in unpaid employment in the home. Most of the other 25 percent went on through four years of liberal arts college, a few on through graduate school, and then they, too, closed the academic doors behind them for good. Vocational education meant primarily a semester of "manual training" for boys in high school and a course in "home economics" for girls, with quite a few of the latter also taking some "typing." Comparatively few young people worked while they were in school, except during the summer. A high percentage of boys and a considerably higher percentage of girls went into unskilled jobs (at least when home-making is put in this classification); and although the assumption was that many of those entering paid employment would work their way up various skill ladders, there was comparatively little thought given any very formal "on-the-job" training — except in the professions and in a few trades. Although "adult education" was talked about, and engaged in by a few, it amounted to comparatively little.

This picture is sharply different today in several important respects, all of them involving admixtures of education — or training — and work.

The percentage going on to some form of post-secondary education has doubled in 25 years. A substantial part of this additional education has a strong technical or vocational orientation. Vocational education has developed in significantly new forms and degree at both the secondary and the post-secondary levels.

As the high school retention rate and the college-going rate have increased, both the number and the percentage of students seeking employment while they are in school have gone up sharply. A doubling of the youth *un*employment rate is itself a significant part of this picture. So, however, though its implications have been less noticed, is a more than doubling of the youth work force participation rate. There has been an accompanying development of the practice of "stopping out" for a year or two, working or trying to work, and then going back to school.

There has been a sharp diminution during these 25 years in the number of jobs (in comparison with the youth population) which are sufficiently unskilled that they require only a minimal education, and a parallel change in youths' attitudes about taking these jobs. Most large employers, at least in the manufacturing industries — which used to pick up the largest numbers of students going to work at 16 or 18 — now hire very few new employees under the ages of 21 or 22. We are still only half conscious of the changes that are taking place as a consequence of vastly larger percentages of young women choosing careers outside the home.

Principally because of changes in the nature of work, "on-the-job training" has been expanded to the point that its annual cost is estimated to be in the $100 billion range, interestingly close to the figure for formal education. Although that estimate is questionable, a major change has clearly taken place in this connection.

The previous almost incidental interest in adult education has developed almost suddenly into major emphasis on "life long learning," though this is still a phrase looking for its content.

The short of it is that education and work are no longer separate and distinct chapters in people's lives. The passage from school to employment, once a matter of moving almost in a moment across a boundary line, has become in many cases a four to eight year transition marked by changing combinations of general education, specialized institutional training, short-term hiring out of various kinds, and then more permanent employment often including substantial training elements in its early stages. Nor is education any longer considered a monopoly or exclusive prerogative of the young; there is an increasing expectation that adulthood will offer and in many instances demand a return to either general or career-related formal education. Identifying the effects of these changes on the role of the business/industry/labor complex seems to me better considered not in terms of a role as "educator" but rather in terms of a necessarily collaborative role in administering an increasingly shared responsibility.

Turning from what are perhaps abstractions to some specific illustrations of the new needs that are developing for collaboration between the school system and the employment system, let's look first at some of the developing incidents of the school-to-work passage.

We talked before, at your meeting three years ago — so I mention it only briefly here — of the increasingly imperative need for some form of combined analysis of prospective career opportunities and "manpower needs" on the one hand and current educational and training activities on the other. We keep our educational and employment statistics separately, with little or no effort — except perhaps in the professions — to match them up. We simply don't know how many young people are proceeding along what career lines, and how these numbers compare with the opportunities that are going to be available at the ends of these lines. Although this problem will not yield to statistical analysis alone, the real difficulty is that there is no clear assumption of responsibility for pulling together the information that is available. Is this up to the educators or to the business/industry/labor complex? Or to both?

A more refined form of this same problem is developing as a consequence of the emergence of a variety of options so far as preparatory courses are concerned. Although we count the opening up of these options a good thing, it creates a new set of uncertainties so far as young people's choosing among them is concerned. When it was a matter of almost everybody's following a single prescribed educational course, the only decision for most young people was how long to stay on that course. Now, however, there are choices to be made between "general" and "vocational" or "technical" courses — or even schools — at the secondary level; then between four-year and two-year colleges; between not only private and public but also proprietary schools.

The notion prevails generally that the primary interest of the business community is in seeing to it that larger attention is given in the schools to the development of particular skills. This notion warrants thorough reexamination. It contributes substantially to the continuing reluctance among educators for developing overly close adminsitrative arrangements with employers and labor unions, being seen as a threat to the liberal arts tradition. I wonder, though, how accurate an assumption this is about the employment community's interests.

Cyril Busbee's question this morning about how to cope with the clamors of the South Carolina Chamber of Commerce that economics be taught with a larger emphasis on the virtues of the historical free enterprise concept. Organized labor's attitude toward the educational establishment, on the other hand, continues to be cool — so that it has been slow, for example, to endorse the career education initiative, though there are probably other reasons for this — because of a feeling that too little recognition is given to the significance of trade unionism in American political and economic history. These "special interest" reactions are obviously factors to be given account in any consideration of the proper role to be played by the business/industry/labor complex in education, though this is by no means to discredit these pleadings; I suspect it has been a mistake to feel that the right balance in educational content can be best assured by maintaining an aloofness from all special interest pleading regarding it. If that was ever true, the changing relationship between education and the rest of the life experience greatly diminishes its validity.

It is important to distinguish here, in any event, between whatever the views may be in various segments of the employment community about the balance and biases of education's philosophies and the very different question of the distribution of emphasis between "basic" and "liberal arts" education on the one hand and skill training on the other. I hear more and more employers complaining not about education's underemphasis on particular skills development but rather about the unpreparedness of young people so far as general work readiness is concerned. "Let the schools just be sure people know how to read and write and do arithmetic," it is commonly put, "and then we will do the rest"; or perhaps even more characteristically "read and write and do arithmetic *and shape up*." Among working people, perhaps most particularly those who have themselves had the least educational advantage, there is often strong opposition to moving their children onto vocational tracks, giving them larger helpings of work-study opportunities, or encouraging their early school leaving by proffering special employment opportunities.

We should question seriously the assumption that employers' primary interest in education today is in assuring a maximum supply of young people with specialized training that matches available work opportunities. Although most of the talk was in those terms ten or fifteen years ago, it appears on clearer hindsight that this was primarily part of an attempted rationalization of the rising youth unemployment rate — which turns out now to have much deeper causes. I don't believe American businessmen's largest concern in this area today is about the skill-training students get in school. They seem to me increasingly conscious rather of the broader problem of how to improve the handling of a youth-to-adulthood transition period which is now characterized by 20 percent unemployment rates — up to 50 percent in the inner cities — and which would not be significantly changed even if there were a perfect match between student work skills and available job opportunities. The business and labor leaders' concern is less, I think, as employers and union leaders than as taxpayers and responsible citizens who recognize the losses and costs resulting from this system's having some way gotten out of kilter. The concern is not so much with education in the traditional sense as it is with working out with educators some new ways of handling this passage between learning and earning a living — where nobody is presently in charge.

There is a related development here. I am not clear about the factors that are involved in the apparent marked increase in the past ten to fifteen years in the amount and the formalization of on-the-job training in so many industries and with respect to so many different kinds of occupations. I suspect it reflects primarily changes in the nature of a good many kinds of work, the widening effects of technology, and a general lifting of skill levels. Whatever these factors may be, this development clearly involves a significant shifting of responsibility so far as the education/training function is concerned. It makes increasingly imperative some further analysis of the distribution of this function between schools and employers.

What is the sensible approach to this situation? Even this cursory review of some of the factors of change involved here makes painfully obvious the insufficiency of any attempt to dispose of the matter by improving the counseling and guidance function. The need is not for more and better counselors but for architects. These aren't problems the school systems can handle alone or even with the "advice" of industry and labor councils and boards. There is a *joint* responsibility involved here.

Let me make just some little suggestions about possible starting approaches to the discharge of this joint responsibility. It involves, again, getting some more *facts* about this situation. I know the problems that are involved in any attempt at evaluation of educational and training programs. It seems to me, nevertheless, that there must be — and that there are — ways to find out more than we presently know about what education/training patterns make superior sense with respect to different types of occupations. We have done this with respect to the professions — depending in this area, incidentally, very largely on practitioners and employers, along with educators. It seems to me that the same thing ought to be possible, at least to some degree, in connection with other types of careers.

Suppose joint councils — including teachers, employers, labor union leaders, and community representatives — were set up in local communities, probably coordinated at the state level, to consider precisely these questions of what kinds of education/training patterns make the most sense in various career areas. I know about the vocational education advisory councils. Yet whether correctly or not, it seems to me that most of these councils are focused on too narrow a set of possibilities and that they reflect too often an institutional bias. The broader problem is how to work out a youth-to-adulthood transitional program.

Suppose then, too, a truly comprehensive longitudinal study were undertaken — with representative cohorts of young people being followed from say age 16 to age 25 as they pursue various education/training courses toward various career objectives; and suppose this could be set up so that a new starting cohort would be picked up by the study each year. I know the difficulties: that the expense is great and that this approach will take ten years to produce results.

I suspect the cost may go as high as one-tenth of one percent of the cost of *not* having the information such a study would give us. As for the time involved — well, it's like planting trees. I wish, too, that there were time here to talk through some of the possibilities of relatively immediate *retroactive* longitudinal studies — taking cohorts of young people now in their late twenties, some failures as well as some successes, and then tracing their case histories back to see what these histories suggest.

This is too little to be persuasive, perhaps too much to be discreet. But someway or other an informational base has to be laid for a collaborative undertaking to develop a youth-to-adulthood, education-to-work, policy based on something better than the now anachronistic illusion that these are separate worlds, connected by bridges that can be crossed in a single day. Turning to the area of "lifelong learning," I'd like to pick up with a particular development which may not be very important in itself but which illustrates the changing relationship between education and work. This has to do with the so-called "tuition refund" plans which are now becoming commonplace, at least on paper, in larger companies. These are programs, as you know, involving employer undertakings to pay all or part of an employee's enrollment costs in connection with education or training courses taken during the employee's off-work hours.

Until comparatively recently, most tuition refund plans were set up by employers unilaterally. A study being made presently by the National Manpower Institute indicates a substantial movement, however, toward the inclusion of provision for such plans in collective bargaining agreements. A review of the approximately 2,000 agreements covering 1,000 employees or more discloses one form or another of employer commitment to provide educational assistance to some 280 of these contracts. The total *potential* cost involved appears to be over $1 billion annually.

It is hard to appraise the significance of this development. It conceivably portends a major expansion of educational opportunity, possibly a substantial shift in educational and training patterns, perhaps even a significant change in the allocation of the costs of education. These plans may be important both in connection with young people's decisions about when to make their moves from school to work and in relationship, beyond this, to the whole continuing-education concept.

There is a marked difference, however, between the pattern of this development on paper and the use so far being made of these plans. Only about three or four percent of all employees eligible for such tuition aid programs appear to be making use of them, and our preliminary estimates are that no more than five percent or so of the employer dollar commitment is being picked up. In the General Motors Cadillac plant in Detroit 260 employees received tuition aid payments last year, at a total cost of about $235,000. These figures compare with 10,000 as the approximate number of eligible employees, and a potential company commitment of about $10 million.

In general, tuition aid payments are limited to job-related training. In one contract, however, there is provision for tuition aid payments to permit all employees aged 60 or older to take formal retirement training courses, and almost all employees in this group are making use of the program. A number of contracts provide for employee leaves of absence for educational and outside training purposes.

The tuition aid practice is probably less significant for what it amounts to so far in itself than as illustration of the possibilities of introducing new flexibility into what was traditionally the virtually complete separatism between education and work.

There may well prove to be larger eventual significance in the already evident movement toward the introduction of alternative work schedules of one kind or another. Full-time employment, eight hours a day, five days a week, makes it difficult for most employees to take any significant amount of education or outside training at the same time. There are increasing demands, however, for changes in this traditional work scheduling. Women are insisting increasingly on opportunities for part-time employment. More and more consideration is being given to flexitime work scheduling, under which employees can shift their working hours to permit their engagement in other activities — including substantial part-time or even full-course education. I suspect that the timing of the now almost certain eventual large-scale expansion of significant "continuing education" hinges in large measure on what is done with respect to the development of alternative work schedules.

I venture this prediction, though timidly with Bill Pierce present: that by the year 2,000 just one generation from now, a third of all institutionalized education will be taken by men and women over 25 years of age, following a period of work; and that in another generation beyond that, this figure will be up 50 percent. To think about education on the basis of an assumption that it involves only youth and only what people do in the first third of their lives is like thinking of energy policy solely in terms of the use of fossil fuels. To the extent this is true, the role of the industry/business/labor complex in remolding its practices and conventions to the demands of this lifelong learning process becomes a good deal clearer.

There seem to me three reasons to expect this development. They have nothing to do with education's being one of life's ultimate satisfactions.

Reason number one in order of immediacy is that women are going to demand the opportunity to requalify themselves for second careers following career motherhood. They have 39 to 40 percent of the jobs in the work force now. In another 10 to 15 years they are going to have half of those jobs. This will mean, almost inevitably, a substantial amount of adult education to include what it takes for women to requalify themselves for something else after going through the business of motherhood.

Reason number two is that the nature of work, more broadly the nature of the employment relationship, is today evolving along lines which mean a rapidly increasing need for career or occupational change requiring off-the-job training. More and more people are being displaced almost suddenly by machines which can do their work as well as they could do it before, and at a lower rate. This is bound to mean an increasing need for retraining in the course of their experience. Fred Burke and Dan Taylor both asked this morning whether there is some exponential development of complexity here which is leading us toward disaster in one form or another. I don't think so — if we accept the necessity of renewing people's competencies so that they can cope with circumstances that have changed since they left school.

Point number three may seem to contradict this. I think it is going to be true that more and more people are going to take more and more education during the middle and later periods of their lives because they aren't needed in the work force, at least as we have traditionally conceived it.

To look back is to wonder whether we have made some of the gains and advances in expanding educational opportunity in this country for humanitarian or for purely economic reasons. I don't know whether we increased the school retention rate in this country in the 1960s because we felt it was a good thing for young people to have more education, or whether we decided to increase it at that point because we were running out of jobs for youth.

The work week at the beginning of this century was 70 hours a week for most people. Today it is 35 to 40. Has that change come as a consequence of humanitarian impulses or because there just isn't enough work in this country today for everybody to do for 70 hours a week? We at least remind ourselves that the fair labor standards act, the minimum wage law, was put into effect in 1935 solely as a work distribution proposition. It wasn't that we thought it would be a good or a humanitarian idea to pay people more money when they worked overtime. It was because we wanted to put a penalty on their working overtime; we were trying to spread the work.

I don't know whether we developed the retirement programs in this country out of a concern for the dignity of older people or recognition of the economic efficiency involved, or simply because it began to develop that there was no longer enough for older people to do. Our motives become suspect because we added the concept of compulsory retirement.

The only way we can today hold to even a 7 to 8 percent unemployment rate in this country is by turning more and more older people out to pasture earlier and earlier and by postponing the entry age of young people into the work force.

Let me use a half-truth, which means it is half false, to make what seems to me the central point about the role of the Business/Industry/Labor Complex as Educator. That role could well be identified as being to provide enough work to make education worthwhile. The quality of falseness in such a statement is that it obviously disregards what most experience since the Golden Period of Grecian history has confirmed. The part that is true is that the functions of education and work are going to have to be coordinated in a manner that takes account of their reciprocal relationship.

After ten years of careful analyzing of this relationship, Sweden — to which we often look for a glimpse of our own future — has now decided that the right answer to youth underemployment is to ration higher education. Starting next month, or perhaps in January, only 38,000 students will be permitted to enroll in post-secondary education courses, and these enrollments must be kept within specified maximums in six or seven specific subject matter areas. These maximums, as well as the over-all figure, have been arrived at by identifying the manpower needs that would be expected to develop in these various areas.

Unattractive as this Swedish solution sounds, it at least illustrates what a coldly logical answer to today's apparent dilemma of too much education for too few jobs might be. There are, moreover, some other interesting aspects of the new Swedish approach. While young people's entry to the colleges and universities is to be curtailed, adults will be encouraged to return to what we would count both secondary and post-secondary education.

This seems to us, given our conditioning, anomalous. Yet this is only, when we think about it, because of our *assumptions* about where education should come in the life pattern.

A recent report by George Bonham in *Change Magazine* is that over 25 percent of the adults in Sweden are "engaged in some form of adult educational program, usually one of the hundreds of study circles sponsored by national labor and industry organizations."

This is a dangerously incomplete reference to what I suspect is a major step, in Sweden, toward an attempt to work out constructively a coordination of education and work, more broadly a constructive redistribution of the education and work functions — and satisfactions — in life's pattern. This is what a consideration of The Business/Industry/Labor Complex As Educator is all about.

Having exhausted not my subject but my time, let me close by suggesting that we will probably get faster to the right answers regarding the relationship between the stewards of the educational and the employment systems by thinking this all through in terms which take full account of the fact that these are hard times for both of these systems. The key to effective collaboration here is perhaps suggested by Lewis Carroll's quatrain — involving two characters whose identity I have forgotten — in *The Hunting of the Snark:*

> The valley grew narrow and narrower still,
> And the night got darker and colder,
> 'Til only from nervousness, not from good will,
> They marched along shoulder to shoulder.

CHAPTER XI

Public Education: The School and the Other Educators

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I have defined education in my recent writings as the deliberate, systematic, and sustained effort to transmit, evoke, or acquire knowledge, attitudes, values, skills, and sensibilities, and any learning that results from the effort, direct or indirect, intended or unintended.[1] The definition stresses intentionality, though I am well aware that learning takes place in many situations where intentionality is not present. It makes room for study as well as instruction, thereby embracing the crucial realm of self-education. And it acknowledges that behavior, values, and tastes are involved, as well as knowledge and understanding. It sees education as a process more limited than what the sociologist would call socialization or the anthropologist enculturation, though obviously inclusive of many of the same phenomena. And it recognizes that there is often conflict between what educators are trying to teach and what is learned from the ordinary business of living.

The definition is latitudinarian in at least two major respects. In the first place, it permits us several angles of vision with regard to the interplay of generations. Education may be viewed as intergenerational, with adults teaching children, the most common arrangement, or with children teaching adults, which is less common but often quite important, particularly in immigrant societies (recall Oscar Handlin's poignant remark in *The Uprooted* about the meditative role of immigrant children in interpreting the new culture to their parents and grandparents — "the young wore their nativity like a badge that marked their superiority over their immigrant elders").[2] Education may also be viewed as intragenerational, with children and adults teaching one another, often across social or cultural boundaries, or it may be viewed as a self-conscious coming of age, of the sort reported in so many sensitive autobiographies. The several perspectives are more than a theoretical nicety. They point to the complex variety of educative processes going on at any time, in a given life, or institution, or community, as people shift roles from one educational situation to another or indeed play more than one role simultaneously.

Second, the definition projects us beyond the schools and colleges to the multiplicity of individuals and institutions that educate — parents, peers, siblings, and friends, as well as families, churches, synagogues, libraries, museums, summer camps, benevolent societies, agricultural fairs, settlement houses, factories, publishers, radio stations, and television networks. It alerts us to the numerous occupational groups (only some of which have been professionalized) associated with educational institutions — Joan Cooney and her colleagues at the Children's Television Workshop are educators, as are S. Dillon Ripley and his colleagues at the Smithsonian Institution and Frank Oppenheimer and his colleagues at the San Francisco Exploratorium — and it directs our attention to the variety of pedgogies they employ.

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[1] The paper draws substantially upon Lawrence A. Cremin, *Public Education* (New York: Basic Books, 1976), and *Traditions of American Education* (New York: Basic Books, 1977).

[2] Oscar Handlin, *The Uprooted* (Boston: Little, Brown and Company, 1951), pp. 253-254.

We have traditionally thought of only the school as having a curriculum, but the fact is that many institutions have curricula that are quite explicit and well defined. Every family has a curriculum, which it teaches deliberately and systematically via conversations around the dinner table, stories in the bedroom, pictures on the walls, and a relentless process of modelling, explanation, praise, and punishment. Every church and synagogue has a curriculum, which it teaches equally deliberately and systematically. The Old and New Testaments are among our oldest curricula, as are the Missal and the Mass, and the Book of Common Prayer. They impose meaning on existence at the same time as they seek to order the most fundamental relationships among human beings. Every employer has a curriculum which includes not only the technical skills of typing or welding or vending or reaping but also the social skills of carrying on those activities in concert with others on given time schedules and according to established expectations and routines. One can go on to point out that libraries have curricula, museums have curricula, Boy Scout troops have curricula, and day-care centers have curricula, and, most important, perhaps, radio and television stations have curricula — and by these curricula I refer not only to programs labeled educational but also to news broadcasts (which presumably inform), to commercials (which teach people to want), and to soap operas (which reinforce certain popular myths and values).[3]

The definition serves other purposes as well. For one thing, it directs our attention to the relationships among the various institutions that educate, and to the effect of one institution's efforts upon another. The rapid-fire pedagogical style of a program like *Sesame Street*, for example, will inevitably affect the activity and pacing of teachers in daycare centers and kindergartens. The presence of fundamentalist churches in a community will inevitably affect the way values are taught in the elementary school —

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[3] On familial education, see Hope Jensen Leichter, ed., *The Family as Educator* (New York: Teachers College Press, 1975). There is an immense literature on homiletics, or the art of preaching, which is revealing of the church or synagogue as educator in its own right, as contrasted with the literature of "religious education," which tends to deal more limitedly with classroom teaching under church or synagogue auspices. On the factory as educator, see Alex Inkeles and David H. Smith, *Becoming Modern: Individual Change in Six Developing Countries* (Cambridge: Harvard University Press, 1974). On television as educator, see Herbert J. Gans, "The Mass Media as an Educational Institution," *Television Quarterly*, VI (1967), 20-37, Gerald S. Lesser, *Children and Television: Lessons from Sesame Street* (New York: Random House, 1974), and the several essays in Richard Adler, ed., *Television as a Social Force: New Approaches to TV Criticism* (New York: Praeger, 1975).

that, of course, was the essence of the conflict in Kanawha County, West Virginia, during 1974 and 1975. And the presence of a large automotive plant nearby will inevitably affect the way vocational guidance is conducted in the high school — ask Arthur Jefferson, the superintendent of schools in Detroit, whether the presence of General Motors makes a difference. Moreover, even in the best of worlds, educative institutions are often in conflict. Family and school may share a mutual concern for the child's intellectual development, but the teacher may be more demanding at the same time that the parent is more sustaining — the tension is at the heart of William Gibsons' lovely drama *The Miracle Worker* (1960), about the education of Helen Keller. Or the teacher may attempt to liberate (by offering intellectual, moral, or vocational alternatives) at the same time that the parent attempts to constrain — think of the countless instances in which parents prefer the immediate earnings of a dependent child to the continuance of a school career that would defer earnings but almost certainly increase them once independence was achieved. Or, bearing in mind Jerome Bruner's distinction between enactive, ikonic, and symbolic learning, the family may emphasize enactive and ikonic education (particularly as it mediates the effects of television), while the school emphasizes symbolic education, and in the end the symbolic education may end up in conflict with what the family has been teaching.[4]

The definition also enables us to shift our perspective from time to time and to view education from the vantage point of the client, focusing on the various ways in which people engage in, move through, and combine educational experiences over time. It is a truism that individuals come to educational situations with their own temperaments, their own histories, and their own purposes, and that different individuals will interact with particular constellations of educative institutions in different ways and with different results. Yet the truism is often honored in the breach. We have developed elaborate systems for determining what teachers are actually teaching from one grade to the next and for assessing what students appear to have learned, but we have no comparable means for separating out what parents, pastors, peers, or television programs might have contributed, with the result that the school tends to receive the full praise or the full blame for whatever occurs. When a youngster enters school with a deficit, whether in knowledge or, more importantly, in the techniques and habits of learning, the school may make a Herculean effort that results in a modest gain on the achievement scales, but the school gets blamed for a bad performance. Conversely, when a youngster enters school with a great deal of knowledge and a well-developed ability to seek out further knowledge, both of which have been learned from parents and peers of similar cultural background, the school may make a modest effort that shows up brilliantly on the achievement scales, and the school gets all the praise. My colleague John Fischer likes to tell the story of the school for tall people, for which the admission requirement is to be six feet in height. It graduates large numbers of tall men and women and then proceeds to take full credit for that remarkable achievement.

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[4] Bruner explicates the distinction in *The Relevance of Education* (New York: W.W. Norton, 1971), pp. 7-8, 18.

The definition is also helpful in the realm of policy making. It enables us historically to trace the shifts from one era to the next in the educational institutions on which the American people have "placed their bets," so to speak. For example, when colonial Americans turned to education to achieve certain social goals, they tended to rely on families and churches; one finds only passing mention of the schools in seventeenth- and eighteenth-century tracts on education. The great shift of the early national period was to begin to stress the schools as instruments of public policy, though it should be noted that the churches were far from forgotten. The same generation that enacted the early laws establishing comprehensive public school systems also disestablished the churches, but they continued to rely on the disestablished churches as instruments of public policy. One need only recall the historic ties between those churches and the public schools of nineteenth-century American to recognize the extent to which the two institutions worked in concert, or indeed to contemplate the striking similarities in substance and values between the McGuffey readers and the pamphlets circulated by the American Tract Society.

It was not until the twentieth century that Americans came to rely almost exclusively on the schools as their educational means for achieving certain public ends, and even then social policy always assumed that families and churches would perform certain crucial educational tasks. And indeed, it is the growing uncertainty about the validity of that assumption concerning families and churches that has given rise to some of our most serious contemporary policy questions. A steady decline since World War II in the prestige and influence of the churches, coupled with profound changes in the character of the family deriving from the movement of women into paid employment, the rise in the power of the peer group, and the rapid extension of television viewing, has occasioned radical shifts in the overall ecology of education, in the relative significance of the several educative institutions, that may well call for fundamental changes in the way educational policy is conceived and formulated.

Finally, the definition is helpful in forcing us to contend realistically with our present educational predicament. Whatever the immediacies of demographic changes, financial stringencies, and the policitel dilemmas arising from teacher activism and legislative intransigence, it is not these that are causing the crisis; the real crisis runs deeper and involves the very nature and sources of education. And unless we are able to alter our ways of approaching educational problems to take account of this fact, there will be little chance of achieving lasting solutions. In this respect, I have argued that we must begin to think comprehensively and relationally about education, as well as publicly. By comprehensively, I refer to the range and multiplicity of institutions that educate and the need to consider that range and multiplicity when we make policy. The fact is that the public is educated by many institutions, some of them private and some of them public, and that public schools are only one among several important public institutions that educate the public. There are, after all, public libraries, public museums, public television, and public work projects, the most extensive of which are the military services. Obversely, it is important to bear in mind that *all* educational transactions have both private and public consequences. Family nurture that encourages independence, church teaching that condemns family planning, industrial apprenticeships that exclude members of minority groups from participation, television news programs that dramatize the human consequences of military operations — these are but a few examples of private educative efforts that have profound public consequences.

To think comprehensively about education, then, we must consider policies with respect to the full range of institutions that educate. To be concerned solely with schools, given the educational realities of the contemporary world, is to have a kind of fortress mentality in the midst of a fluid and dynamic situation. Education must be looked at whole, across the entire life span, and in all the situations and institutions in which it occurs. Obviously, public policy will not touch and ought not to touch every situation with equal intensity — that happens only in totalitarian societies, and even in totalitarian societies it never happens quite as efficaciously as the leaders would prefer. Indeed, there are some situations public policy will not touch at all. But it must at least consider each, so that wise choices can be made as to where to invest what effort to achieve which goals with respect to which clienteles. The United States Congress already does this when it decides to allocate so many dollars to children's television rather than schooling (and in dealing with children's television it inevitably affects the family). State legislatures do this when they assign funds to the state arts council rather than to the state university. And local communities do this when they decide in a period of financial stringency to close a public library rather than a public school. I would only insist that the range of possibilities be understood far more explicitly than in the past and that public authorities approach these questions of allocation rationally rather than whimsically, with a full awareness of educational consequences.

By thinking relationally, I mean that, whenever an educational effort goes forward, it should do so not in isolation from other educative institutions but in relation to them. Individuals come to educational situations with a history of earlier educational encounters and with the likelihood that there will be contemporary and subsequent educational encounters elsewhere. The point of thinking relationally is simply to be aware of these other encounters in designing any program. For parents, day-care workers, schoolteachers, pastors, editors of children's encyclopedias, training officers in industry, and directors of senior citizens' centers, the message is essentially the same: whatever is done, to be effective, must be done with an awareness of what has gone on earlier and what is going on elsewhere. For the day-care worker to be unaware of the language learned in the family, for the schoolteacher to be unaware of the Head Start program in the day-care center, for the pastor to be unaware of the religious observance — or lack of it — in the family, for the editor of the children's encyclopedia to be unaware of the elementary school curriculum, for the industrial training officer to be unaware of the high school vocational program, and for the adult educator to be unaware of what is being shown on television, is sheer idiocy, in the root meaning of that word, namely, removal from social reality. I should add, incidentally, that to be aware of the other educators is not necessarily to succumb to them, or to respond to them, or even to take account of them; it is merely to canvass them from the viewpoint of one's own curriculum in the interest of achieving maximum effectiveness. To avoid the canvass is to risk duplication, or ineffectuality, or, worst of all, irrelevance.

II

I have put forward these formulations in an effort to encompass the various elements Kenneth Hansen has built into the program of the Summer Institute. Wilbur Cohen and Sidney Johnson have talked about the family as educators; Joan Cooney has talked about the mass media of communication as educators; Stephen Bailey has talked about the political system as educators; Willard Wirtz has talked about business and industry as educators; and others have talked more generally about the educational effects of the arts, religion, nutrition, bio-chemical realities, the economic system, and the American culture in general. One could proceed to synthesize these elements in various ways — by explicating, for example, the different processes by which policies are determined in the different systems, or by indicating the various points at which each system impinges on the others, or by charting the movement of particular individuals and classes of individuals through the several systems (though, as Nicholas Hobbs of Vanderbilt University has pointed out, it is often exceedingly difficult to move from one system to another).[5] What I should prefer to do, however, is to view the complex panorama of American education from the vantage point of the school. How might educators working in the schools take proper account of the phenomena described here? Permit me to organize my comments around three theoretical concepts borrowed from the work of my colleague Hope Jensen Leichter: engagement, linkage, and agenda.[6]

First, engagement. If we review the several areas of the school curriculum, we become aware that in some the school originates much of what it teaches, while in others the school is a "Johnny-come-lately." Mathematics is a prime example of the first. In mathematics, the student learns much of what he needs to know for the first time in the classroom (though with the new mathematics series now available for television through the Education Development Center, that may become less and less true). So also with foreign languages. There as well, unless the student happens to choose a language regularly used at home or in church or synagogue, he learns virtually all of what he needs to know for the first time at school. In other realms, however, English, for example, or social studies or hygiene, or the arts, or the domain of morals and values — the child has his first learning and possibly his most persuasive learning earlier and elsewhere. In these areas, it is important for the school to engage the instruction of the other educators and seek to strengthen or complement or criticize or contravene that instruction, or, more generally, try to develop in students an awareness of that instruction and an ability to deal critically and independently with it.

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[5] Hobbs makes the point in *The Futures of Children* (San Francisco: Jossey-Bass, 1975).

[6] See, for example, Hope Jensen Leichter, "Some Perspectives on the Family as Educator," in Leichter, ed., *The Family As Educator*, pp. 1-43, and *The Family in Today's Educational World* (Chicago: The National PTA, 1977).

A few examples may be cited to illustrate the several kinds of engagement. *Strengthen:* A youngster from a musical family begins violin lessons at an early age and becomes a fairly accomplished performer by the time he is twelve. The middle school can encourage him, giving him credit, perhaps, and making him concertmaster of the school orchestra; but the essential dynamism of that phase of his education is outside the school and will probably remain there. *Complement:* The motion picture version of *Oliver Twist* appears in a local theater that features reruns. The high school can modify its curriculum to introduce the novel itself into a number of English and history classes. For some students, the film will be a letdown, for they have developed that remarkable capacity to imagine more richly from good literature than any film maker can do it for them. For most students, the film will bring the novel to life in ways that would be difficult to accomplish without dramatization. For all students, the film will provide an opportunity to develop a critical visual literacy that extends beyond so-called good literature to the modern popular arts. *Criticize:* Several television series featuring the police (someone has called these series the Westerns of the late twentieth century) are enjoying runs during prime time. The school can help students to scrutinize the ways in which the dramatizations deal with the First- and Fifth-Amendment rights of citizens and to compare these with the interpretations of the courts. It can also invite some real policemen in, via the vocational guidance program, to talk about the actualities of the job. *Contravene:* Packages of newly introduced breakfast cereals and the television commercials that advertise them make certain assertions about the nutritional value of the cereals. The elementary school can test the assertions against generally accepted facts about nutrition and let the youngsters draw their own conclusions.

The concept of linkage is closely related to the concept of engagement. It stresses the fact that to do some of its work well the school must collaborate with other educative institutions. It is more than a matter of finding "realistic" locations for academic teaching; it is rather that some things that are important to learn can be learned better outside the school. The school can collaborate with the family, for example, in a host of projects that range from parent-assisted homework to the exploration of particular ethnic traditions of cooking, costume, folklore, and music. It can join with the church and synagogue for the celebration of particular religious ceremonies, not, as with so many released-time programs, because of any assumption that religion is not the business of the school, but rather because what the school ought to be teaching about religion needs to be exemplified by forms of liturgical experience that are inappropriate to the school.[7] The school can join with the library and the museum in the development of lively programs of local historiography, and indeed if the museum's collections are of aesthetic worth, it can serve as a uniquely rich locale for school-sponsored programs of education in the arts. The school can join with the community recreation center in multigenerational programs in the crafts, the dance, music, and athletics. It can join with local businesses and governmental agencies in programs of vocational exploration, such as the one Urie Bronfenbrenner and David Goslin recorded in a remarkable film (available through the Russell Sage Foundation) portraying a group of youngsters participating in the activities of the Detroit Free Press. And it can join with the local radio or television station to put on programs of information and entertainment that are of educational value to adults and children alike — the Philadelphia public school system recently announced the beginning of such a collaborative effort with the local PBS station in that city.

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[7] My colleague Philip H. Phenix has written incisively and persuasively concerning the school's unavoidable responsibility for religious education. See, for example, Phenix, *Intelligible Religion* (New York: Harper and Brothers, 1954), and *Religious Concerns in Contemporary Education: A study of Reciprocal Relations* (New York: Bureau of Publications, Teachers College, Columbia University, 1959).

The concept of the agenda is really intended to assert the integrity of the school curriculum, and is introduced to explicate the point made earlier, that to be aware of the other educators is not necessarily to succumb to them, or respond to them, or even take account of them. The school, beyond all other educators, bears a historic responsibility for conveying tested knowledge and accurate information, and for teaching the processes of organized and disciplined inquiry. For this reason if no other, the school curriculum must have its own scope, its own balance, its own sequence, and its own coherence, which then in turn become the bases for establishing its own educational agenda. To talk about engagement and linkage is not to imply that the primary obligation of the school is to respond to every outside opportunity. It is rather to assert, once again, that the school must know what is going on elsewhere in order to do its own work well. *Oliver Twist* may arrive at the rerun theater, and it may simply not be possible to take advantage of its availability; when *La Boheme* is shown live on network television a month later, the opportunity may prove a bonanza to the music department. The new cereals and the commercials announcing them may arrive in force in Battle Creek, Michigan, but there may be more politically prudent ways of teaching the facts of nutrition in that particular community. The local librarian may be a joy to collaborate with, while the curator of the local historical society may be a bear. The permutations and combinations are legion; the point is for the school to be aware of the full range of possibilities and then choose wisely and well in terms of its own special needs and resources.

In some realms, conflict will be difficult to avoid, especially if the school is to remain true to its own commitments. Edward Jay Epstein and Ron Powers, for example, have documented the extent to which television news programs are increasingly constructed with an eye toward their entertainment value (the recent film *Network* caricatured this development), while Paul Weaver has argued that television news differs essentially from print news in that television news presentations tend to close by propounding intellectual resolutions of the issues they raise while print news presentations tend to close by leaving the issues unresolved, thereby encouraging readers to draw their own conclusions.[8] If Epstein, Powers, and

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[8] Edward Jay Epstein, *News from Nowhere* (New York: Random House, 1973); Ron Powers, *The Newscasters* (New York: St. Martin's Press, 1977); and Paul H. Weaver, "Newspaper News and Television News," in Adler, ed., *Television as a Social Force*, pp. 81-94.

Weaver are correct — and I judge that they are — then the commitment of the school to critical inquiry is fundamentally at variance with the commitment of television to entertainment; and, given the pervasiveness of television in our lives, the differences cannot be glossed over if school programs of English and social studies are to make a difference.

A related point might well be made respecting the school's concern for the development of individual children. There has been a good deal of comment in recent years, much of it utterly romantic, I believe, about reducing the period of compulsory schooling in the United States so that youngsters can be released from the boredom of the school to partake of the more engaging education of a full-time job.[9] Now, there is no denying that much that passes for schooling is consummately boring, nor can one overlook the fact that there are some engaging jobs waiting for youngsters with the proper qualifications. But the record of the schools over the years in their concern for the development of individual human beings, granted all its imperfections, is simply superior to that of business and industry; and until we can be more certain than we have any right to be at this point that apprenticeships of all kinds will be educative rather than exploitative, I would prefer to see them proceed under the school's supervision, at least until youngsters are seventeen or eighteen years of age. The school in turn needs to do far more than it has in the past to relate apprenticeships of every kind to the more general program of academic studies, to help students impose meaning on their experiences in business, industry, government, and community agencies and to connect that meaning with what goes on in the social studies, literature, the sciences, and the arts, If we have learned nothing else from two generations of progressive education, we should at least have learned that all activities are not equally effective in stimulating intellectual and personal development.

Finally, with respect to the agenda of the school, I would reaffirm the simple fact of the efficacy of schooling. A great deal of nonsense has been propagated since the publication of the Coleman and the Jencks reports to the effect that schools make no difference. The conclusion, a wholly unwarranted inference from the data and the arguments of those reports, is simply not true, and the concept of the educational agenda is meant to reaffirm that the school retains agency and potency in choosing those functions that it will undertake as its own special concern. Everything we know about unusually effective schooling indicates that it is effective because it is purposeful, systematic, focused, and clear about what it is trying to accomplish, and because it proceeds in concert with at least some of the other educators, especially the family.[10] Schools must make their own agenda — in the last analysis, that is what curriculum making is really about — and the argument here is that they should construct and pursue their agenda with full awareness of what the other educators are attempting to do.

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[9] The argument for lowering the compulsory school attendance age is given in *The Reform of Secondary Education: A Report to the Public and the Profession by the National Commission on the Reform of Secondary Education, Established by the Charles F. Kettering Foundation* (New York: McGraw Hill, 1973). The romanticism of the argument is pointed out in Eleanor Farrar McGowan and David K. Cohen, "'Career Education' — Reforming School Through Work," *The Public Interest*, No. 46 (Winter, 1977), pp. 28-47.

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[10] For the efficacy of schooling, see Alexander M. Mood, ed., *Do Teachers Make a Difference?* (Washington, D.C.: United States Government Printing Office, 1970), and *How Teachers Make a Difference* (Washington, D.C.: United States Government Printing Office, 1971); Harvey A. Averch *et al.*, *How Effective Is Schooling? A Critical Review of Research* (Englewood Cliffs, N.J.: Educational Technology Publications, 1974); Herbert H. Hyman, Charles R. Wright, and John Shelton Reed, *The Enduring Effects of Education* (Chicago: University of Chicago Press, 1975); and Thomas Sowell, "Patterns of Black Excellence," *The Public Interest*, No. 43 (Spring, 1976), 26-58.

III

Permit me two brief observations by way of conclusion. They address the special responsibility of the chief school officer, whether state or local, with respect to any implementation of the principles I have propounded. First, it is anomalous, but I think revealing, that in the United States we elect or appoint boards of *education*, which then proceed to employ superintendents of *schools*. Granted, the proper management of a school system is no small task, and it readily consumes the entire time and energy of any skilled executive — and then some. Yet, I would contend that the superintendent of school in any state or locality is better equipped by training and commitment than any other individual to lead in making the community aware of the full range of its educational resources. That said, I would add that there is much in our time-honored separation of school politics from general politics in the United States that stands squarely in the way of the kind of comprehensive thinking I have been urging. The separation grew up for good and sufficient reason, namely, to insulate the schools from the worst of partisan political controversy. Its unintended consequence in our time, however, has been to frustrate attempts to bring about collaboration among various educational institutions and authorities.

John Henry Martin and Charles H. Harrison proposed a useful device some years ago whereby citizens might inquire into the character and the quality of the educational services available to themselves and their children. They called it the "local educational convention."[11] Such a convention, they argued, could provide a useful arena for traditionally independent individuals and authorities (both public and private) to exchange ideas via a political instrument that would have no direct power beyond the power of discussion and recommendation — somewhat in the fashion of the White House conferences that have long been held in the areas of education and child welfare. Now, if the dialogue at such a convention on the state or local level were genuine and if any recommendations that emerged were true outgrowths of the dialogue — which admittedly has not always been the case with White House conferences — then it could be an immensely useful vehicle for stimulating interest in educational affairs at the same time that it conveyed information concerning the range and variety of available educational programs. It could also serve the cause of comprehensive educational planning, though in the end I think such planning ought to be undertaken by other agencies, with more carefully defined powers and responsibilities.

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[11] John Henry Martin and Charles H. Harrison, *Free to Learn: Unlocking and Ungrading American Education* (Englewood Cliffs, N.J.: Prentice-Hall, 1972).

Having made the point about comprehensive educational planning, I would also add a final caveat about localism. Every one of the generalizations I have advanced will apply differently in different state and local communities. The relations between school and family will vary immensely from the urban black ghettos of Detroit and Los Angeles, to the rural Mennonite villages of Pennsylvania and Ohio, to the surburban white preserves of Scarsdale and Glencoe. The availability of two dozen television channels in New York City creates in and of itself a profoundly different educational situation from the one in Fairbanks, Alaska, or Honolulu, Hawaii. The presence of the Art Institute of Chicago and the Museum of Fine Arts in Boston affords unique opportunities to the local schools of those cities, as do the presence of the Smithsonian Institution in Washington, the American Museum of Natural History in New York, and the Exploratorium in San Francisco. The bitter conflicts of 1974 and 1975 in West Virginia rendered the communities of that state less ready for certain forms of collaboration between church and school and more ready for others. As always, political, economic, and historical factors will profoundly influence what is feasible and advisable in any given situation; and for that reason alone, the school administrator who would act on the principles I have proposed will begin with a careful canvass of the educational resources that are actually available and the context in which they operate, and then gradually involve the people on whom any fruitful collaboration will ultimately depend.